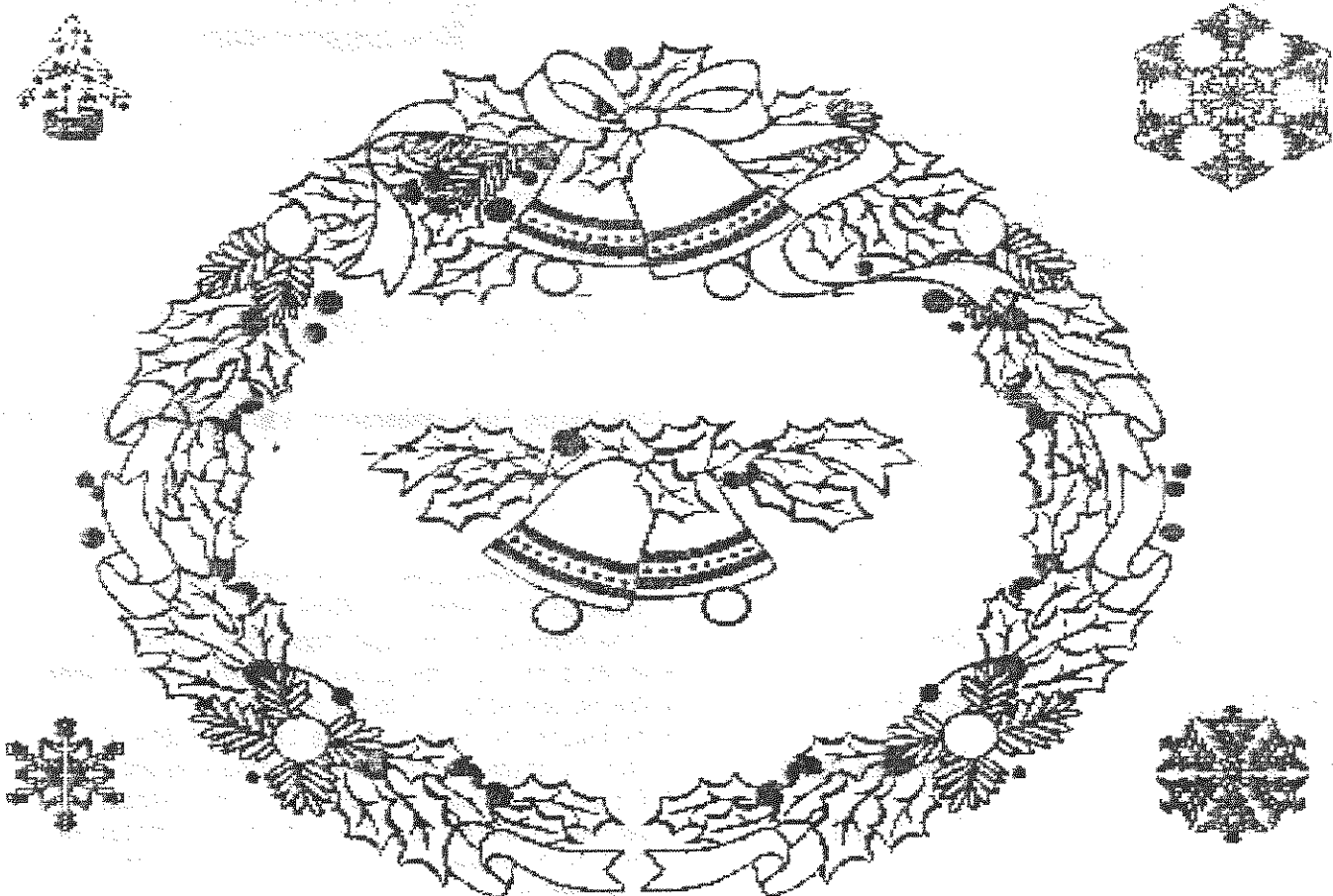


WEST PENN

99ER S NEWS

VOLUME 2 NUMBER 13 DECEMBER 1997

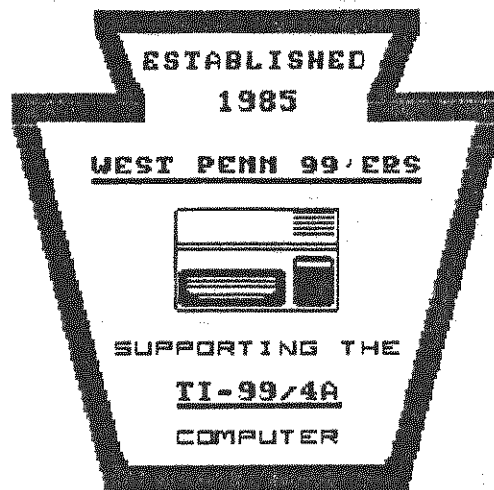


Page 2. Club Info.	Page 6. Speed up your TI
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Page 3. Pres. Message	Page 8. All the Char set
Page 4. FEST WEST 98'	Page 9. Wife tells all
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Merry Christmas FROM
THE WEST PENN U.G.

WEST PENN 99'ERS CLUB INFO

Next Meeting Date: December 16, 1997
 Meeting Location: Penns Woods Civic Association
 Just off Route 30
 N. Huntingdon, Pa
 Time of Meeting: 7: P.M.



GENERAL ITINERARY OF OUR CLUB'S MEETING

6:45 P.M. Doors Open
 7:00 P.M. Genrral Meeting
 7:45 P.M. Demos and New Info
 8:45 P.M. Questions and Answers
 9:30 P.M. One on One Help
 10:00 P.M. Socializing
 10:00 P.M. Doors Close

MEETING HIGHLIGHTS FOR THIS MONTH

CARTRIDGE DEMO'S.....Demo by Paul Brock
 Up date on the new year.....Open to members
 Fun with the TI.....Open to all
 Help with C 99.....Demo Norm Rokke
 Help with equipment.....Open to all

LIST OF WEST PENN OFFICERS FOR 1998

President:	Paul Brock	412-478-2754
Vice-President:	Norm Rokke	614-264-6442
Treasurer:	Ed Mandich	412-824-5566
Recording Secretary:	Jim Weigand	304-738-2110
Corresponding Secretary:	Paul Brock	412-478-2754
Librarian:	Mickey Cendroski	412-265-5201
Newsletter Editor:	Paul Brock	412-478-2754
Assistant Editor:	Paul Brock	412-478-2754

The West Penn 99'ers Users Group is a Non-Profit organization, dedicated to encouraging the continued use of the TI-99/4A home computer.

Our Membership Fee is:

- * \$15.00 per year for an INDIVIDUAL / FAMILY membership.
- * \$10.00 per year for a NEWSLETTER ONLY membership

Those having Full memberships are entitled to the many extra benefits our club has to offer.

Some of those benefits are:

- * Getting to meet some of the nicest people.
- * Demos of the latest TI-99/4A software.
- * Free copying of our West Penn 99'ers Disk Library.
- * Up date of T.I. news, Local, National, International.
- * One on one help / Problem solving.
- * Participation in our Module Lending Library.
- * Participation in our Video Lending Library.
- * Ribbon re-inking- for just \$1.00 per ribbon.
- * Various Computer supplies - at a substantial savings.
- * Ability to trade or sell computer equipment, or electronics.
- * Help on getting equipment fixed.

We meet the third Tuesday of each month at the PENNS WOODS CIVIC ASSOCIATION in North Huntingdon, PA. at 7:00 P.M.

If you can't make it to our meetings...at least become a Newsletter member - and enjoy our NEWSLETTER FORMAT- done entirely on a TI-99/4A computer. Some Articles are written by other computers.

SEE PAGE 10 FOR OUR WEST PENN MEMBURSHIP APPLICATION.



FOR THE RECORD BY PAUL BROCK NOVEMBER MINUTES

The meeting got off to a good start at 7:00. As for all the reports, we just skinned through them. There was only seven members present. We had our elections of officers. Not much change, One change was the Corresponding Secretary, which went to Jim Wiegand. any correspondence should be directed to Jim.

Norm brought the Tee shirts for the raffel, but only seven members present, I thought that we would wait untill next month for more members to show.

Ed reminded me that the DUES are DUE! It is that time again. We are hoping for more members to come and participate.

Norm reported on the Chiago show. He spoke of the empty tables. He also mentioned the important people that was present. Any suggestions for next year would be appreciated.

There was a small discussion about the news letter. We want to send it out ever month, but there may be a problem with the funds. All of the officers was not present, so we will continue the discussion this mon. The minutes of Oct. will stand-no corrections.



The Pizza arrived, and I adjorned the meeting. The pizza was good and hot, We also had pepsi. It came with the pizza. Ed wanted to let Mickey know that we all enjoyed the pizza.

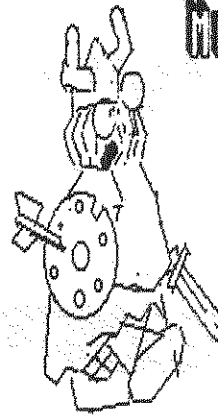
I got a call from home and had to leave a little early. Norm helped to close.

We have a new member that will be joining soon. Welcome Fay Young!!



Untill then my QUILL has run out of ink!

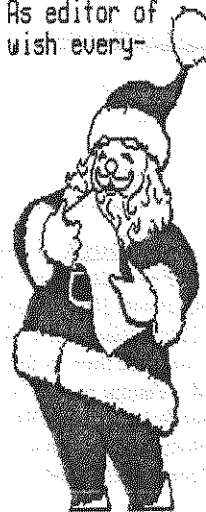
See you on the 16th of Dec.



MESSAGE FROM THE PRESIDENT & EDITOR

It's the last newsletter of the year. I hope that I can get it out with out a hitch. I came home from the meeting, put the equipment away (just piled it in one corner), as I useually do and try to get all my chores done around the house so I can get started on the newsletter. Some times things just don't work that way. I put things away and then I can't find them. I start to do something on the TI and something quits working for me. Does this sound normal?

As editor of the West Penn News and members, we wish every one a very



HAPPY CHRISTMAS AND

AND

HAPPY NEW YEAR

A Christmas Story:

My wife wanted two gifts last Christmas: a metal detector and some jewelry. On Xmas day, I presented her with a metal detector. Then just before dinner I told her I had one more present. Immediately she guessed it to be the jewelry. "Where is it?" she asked. "It's buried in the back yard," I quipped...

HAPPY BIRTHDAY

 TI'er where ever you are!

The SouthWest Ninety Niners User Group Proudly Announces
FEST WEST '98 - LUBBOCK

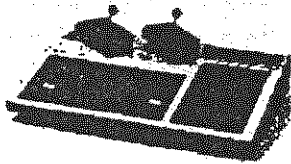
Where: Sheraton Four Points Hotel and Texas Instruments, Inc., Lubbock, Texas

When: February 14, 1998 from 8:00 A.M. until ??:?? P.M.

THE FIRST TI COMPUTER FAIR TO BE HELD AT THE BIRTHPLACE OF THE TI-99/4A!

TEXAS INSTRUMENTS **FEST WEST '98 - LUBBOCK**

A "TI Experience" will be held on the morning of February 14th at the Texas Instruments Facility in Lubbock where the TI-99/4A Home Computer was manufactured!



Be in Lubbock, Texas for the first ever TI-99/4A Homecoming!
 Meet fellow TI99ers from all over the country and world,
 including some from our past.
 This will be a true ONCE IN A LIFETIME experience!

For more information, contact ...

The Official Fest West '98 Web Site: <http://personal.riverusers.com/~twills/fw98.html>

The SouthWest Niners U.G. Web Site: <http://www.theriver.com/Public/sw99ug/>

Tom Willis - (520) 886-2460 - Twills@TheRiver.Com or Mike Doane - (520) 298-3835 - MDoane@TheRiver.Com

HOTELS:	RATES	TELEPHONE	REQUEST RATE FOR
Sheraton Four Points	\$54 for 1 or 2 persons; \$10 each Addl Person	(806) 747-0171	Texas Instruments Computer Fair
Koko Inn	\$44 for up to 4 people	(800) 782-3254	Fest West '98

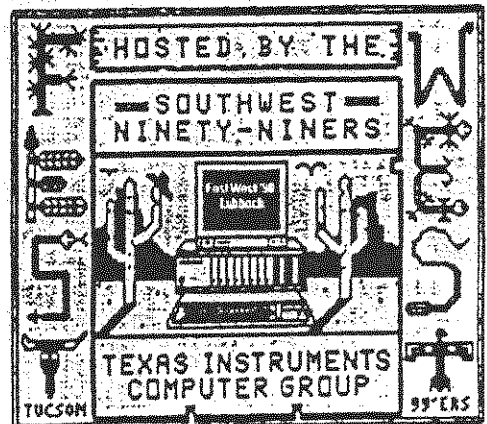
Fest West '98 - Lubbock Schedule

- 2/13/98 - 4:00 PM until 9:00 PM - Pre-registration in the Sheraton Four Points Hotel Hospitality Room.
- 2/14/98 - 8:00 AM until Noon - TI Experience at TI facility.
 NOTE: You must be there before 8:30 AM!
- 1:30 PM until 6:00 PM - Vendor portion of FW98 in the Sheraton Four Points Hotel's Santa Fe Ballroom.
- 1:00 PM until ??:?? - Hospitality Room at Sheraton Four Points Hotel.

Door Prizes, Raffle,
 Speakers, Demos,
 TI-99/4A Personalities,
 and more!

Don't miss the TI Event of a lifetime!
 Be in Lubbock on February 14th, 1998 for
Fest West '98 - Lubbock!

Admission only \$4.00 per person. Children under 15 free when accompanied by a paying adult.



Texas Instruments Logo used with permission of Texas Instruments, Inc.

HOW TO REMOVE THE COVER FROM THE P-BOX

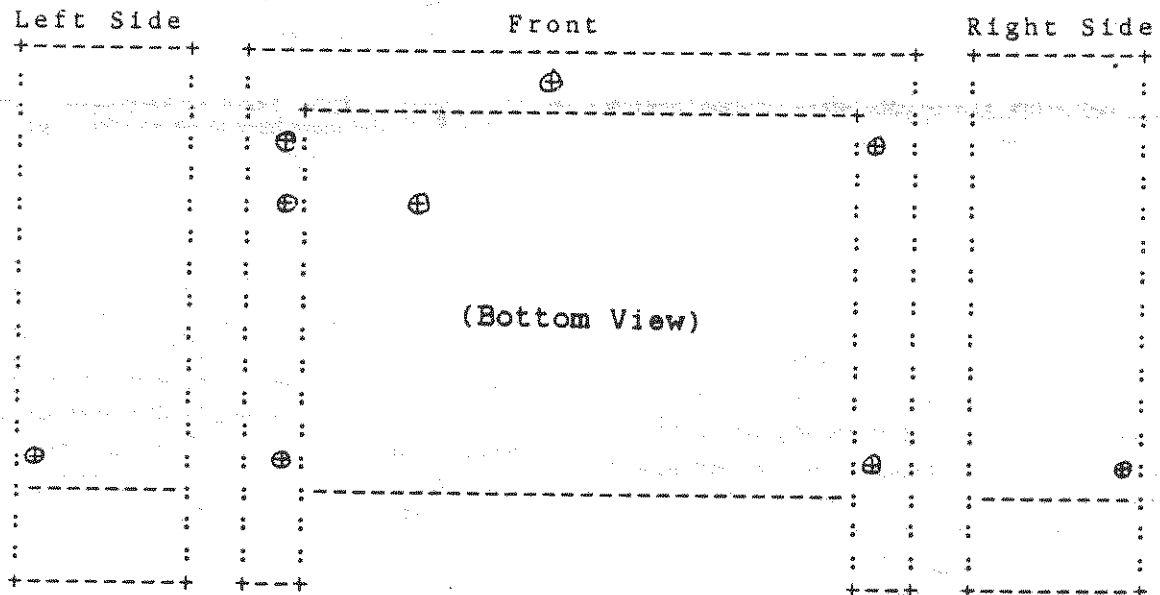
By: R.J. Bieber - The Southern Nevada Users Group

Removing the cover from the P-box is a very simple task. It involves nothing more than removing 15 screws and then carefully sliding out the chassis assembly.

- Remove all cards from the P-Box.
- Remove 1 screw from each side of the cover.
- Remove 7 screws from the bottom.
- Turn the P-Box on its face (Protect the Power Switch)
- Remove 6 screws from the back.
- Carefully lift the chassis assembly out of the case. It should slide out easily. DON'T force it or you may break the plastic light tubes!!

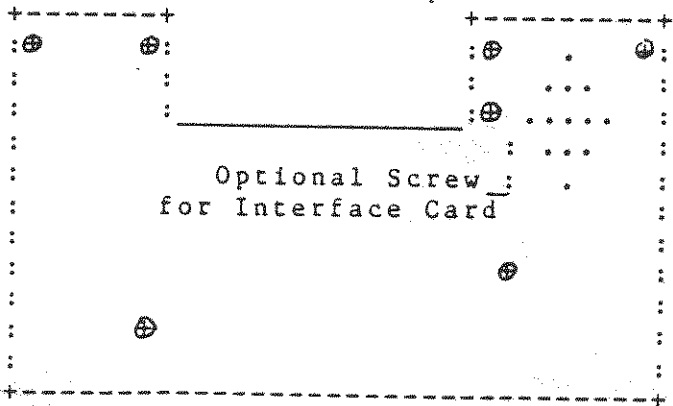
If the chassis assembly doesn't come out easily, then check to be sure all of the cover screws have been removed and try again.

Once you have removed the P-Box cover you have easy access to the card connectors, power supply and cooling fan making for an easy cleaning job. You'd be surprised how much dust the fan sucks in over a period of just a few years. While you're at it why not replace the noisy fan with a quieter whisper type fan.

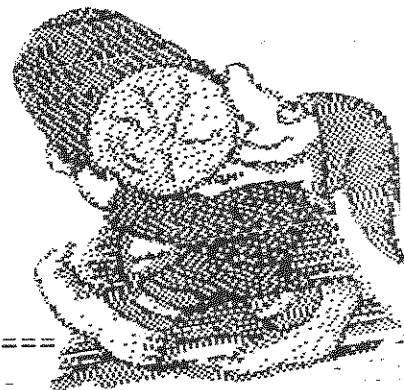


(Bottom View)

Back - Top



Optional Screw
for Interface Card



Speeding up your console

By JESSE C. SLICER

Does your stock T199/4A console seem to be dragging in these modern days of computers running on 33 MHz 80486 and 68040 systems? If so, perhaps a quickie speedup is for you. The following instructional will show you how your stock T199/4A can be speeded up from 3 MHz to 3.58 MHz. I accept *no* responsibility in the damage of anyone's computer equipment; however, I have taken care to ensure success. I credit most of the technical material presented here to Barry Boone, who first told me how this modification was done. Make sure you read this *entire* article before you take any action whatsoever.

BEFORE YOU START

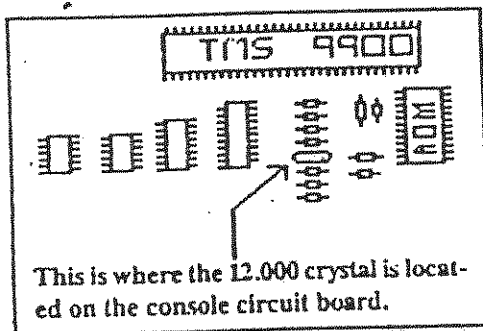
Before you begin dismantling your console, eager to speed it up, there is a part you may or may not need to buy. This is the 14.31818 crystal (this is *not* a clock crystal). I was once given two defunct Commodore VIC-20s and each of them had these for their video circuitry. Otherwise, it will be a trip to your local electronics store. Most Radio Shacks do not have this in stock but they can order it for you. It takes about four days, and the cost is about \$4.50.

GETTING STARTED

With part in hand, and standard tools at your side, you are now ready to begin. Open the console all the way until you have the circuit board facing up at you. About one and one-half inches below the 9900 microprocessor and just to the right of the 9904 sound chip should be a component that looks almost like the one you just acquired. Carefully note the number on the one on the circuit board. If it is not 12.000 (might be 28.000), then this console cannot be modified in this manner.

REMOVING THE OLD CRYSTAL

Use your fingers to locate the solder pads for the crystal on the bottom of the circuit board. Flip the circuit board over. Using a desoldering iron, remove the solder pads surrounding the leads. The crystal can now be pulled out of its normal place and set aside. *Do not throw it away!* You have a definite use for this that I shall describe later.



Face the numbers that are on the new crystal in the same direction the old one was, slide the new crystal into the area where the old one was located. Using a soldering iron, place small solder pads around the base of the leads on the circuit board. Then, using wire snippers, cut the leads down to your solder. Clean up the area on the circuit board, close up the console, and turn on your computer.

THE MAGIC HAPPENS

Run a few programs and note the increase in speed they have. Enjoy how you gained 19.3 percent increase in pure microprocessor speed. Then, as you run some programs (terminal programs, graphics intensive, for example), you begin to notice ...

PROBLEMS!

Ack! Why did there have to be a snake in paradise? All is not lost. You can still use your terminal programs and graphics intensive programs with your new console. remember when you saved the 12.000 crystal? How about we put them *both* in and have a switch between them? Sounds like a good idea. Let's do it.

Assuming you read through this entire document before you started, this will save you some trouble. First, obtain a double pole, single throw (DPST) switch from ye olde electronics shoppe. this should have six connections on the bottom of it. also, obtain about 10 inches of some thin duralloy wire. Cut the wire in half and solder one end of each of the wires onto the middle leads of the switch. Then, instead of installing the new crystal as shown under "installing the new crystal," install the other ends of the wire into the old crystal "socket." After that is complete, solder (remembering the way the numbers were facing in the socket (key them with the wires) each crystal to the two paired leads of the switch. Mount the switch somewhere on your console. I cut a hole in the back and glued it there. You now can switch between a standard console for those problem programs and the new *speedy* console that gets your work done somewhat faster!

ENJOY!

Programs that do intensive number crunching or memory manipulation will benefit from this the most. Disk I/O will speed up slightly only because the code in the ROMs are being executed by the faster processor. Good luck and warp speed!



REPLACING A TI-994A KEYBOARD

By Herman Geschwind
c/o VAST USER GROUP

Replacing a keyboard on a TI-994A is really a very simple job that requires no special skills beyond the use of common sense and ordinary prudence, nor are any special tools or soldering required.

By the way of tools, all that will be required is a medium size (1/8") Phillips head screw driver and perhaps a flashlight.

First off, inspect your keyboard purchase and make sure that the keyboard layout is the same as your TI keyboard. If there are any extra keys or if the keycaps are labeled differently, STOP. Adapting a non-99/4A keyboard for use with the 99/4A Home computer requires special skills which are beyond the ken of the average layman, if it can be done at all.

TI has subcontracted for keyboards from various sources in Japan and Korea. Thus the shape and texture of the keycaps might be different. Don't let that put you off. The main thing is that the number of keys and the layout are the same as your original.

If your keyboard passes this test, unpack it and test all the keys. Look for keys that might be binding or feel "sticky". Try to get the feel of the key action once you are satisfied that

your replacement passes this test, go on.

Disconnect all cables from the console (Power, video, PE Box, ect.) Your console should be cool. If you have just used it, allow some time for it to cool down and for whatever residual electrical charges there might be to dissipate. Observe normal precautions about electricity!

On a clean working surface, turn the console over. There will be seven Phillips screws to undo. Four at the narrow end of the console, three at the other end all recessed. After undoing the screws, the bottom shell should come off. If it does not, recheck to see that you have removed all the screws.

Once the bottom shell has been removed, three components will be visible, a printed circuit board approx. 4" square which houses the power supply, the keyboard assembly, and a larger assembly which runs parallel to the keyboard and power supply all the way across the console to the motherboard.

The power supply is held in place by two Phillips head screws along the edge closest to the keyboard assembly. Remove these two and gently move the power supply board an inch or so to the side. Don't force anything since these are wires attached to the power supply board.

Next, locate and undo the four Phillips head screws that secure the keyboard assembly. Gently lift the keyboard assembly an inch or so. You might have to lift

the edge of the motherboard just a little to allow the keyboard to clear.

At this point you will notice that the keyboard is attached to the motherboard by a ribbon cable. Locate the connector at the motherboard side. Use the flashlight if necessary. Gently pry the connector loose by pressing with the screwdriver. Do this in several steps along the length of the connector. The idea is to remove the connector without bending any of the pins on the motherboard.

Once the connector has unsnapped, remove the keyboard assembly. Take time to take a good look at the row of gold pins that were uncovered when the connector came off. Make sure that all the pins are straight and evenly spaced. If not gently try to straighten which ever pins are bent. If this is necessary, proceed with caution and use a minimum amount of force!

Insert the new keyboard assembly without forcing it in place. Line up the connector of your new keyboard with the pins. GENTLY start connecting the pins with the new connector. Visually double-check that all pins are mated with the connector. If not, pry the connector loose and try again. Being too hasty at this step could result in a broken pin, so be careful! Once you are sure that everything

is lined up properly, firmly but gently press the connector down onto the pins.

Relax now, the most ticklish part of the job is behind you. Next observe that there is approximately one to two inches of extra ribbon cable. This extra length needs to be folded up and into the space between motherboard and console housing as you simultaneously seat the keyboard assembly into place. To seat the assembly, you also need to lift the motherboard edge just a bit for the edge keyboard assembly to slip under it, simultaneously try to get the extra length of ribbon cable to fold as described. If this sounds like a job for three hands, you are right and a helper at this point of the installation does make things easier.

Now, line up the screw holes and secure the keyboard assembly with one screw. Lift the console a little bit (remember, everything should still be upside down) and test the row of keys with the numbers on it. There should be full travel for all the keys, particularly the keys numbered 4 through 8. If any of these keys appear to bind or feel different from the 1 or 0 key then the ribbon cable is not folded properly. Undo the one screw and recheck the ribbon cable. Remember, any extra length of ribbon cable

CONTINUE PAGE 9..

THE WHOLE T.I. CHARACTER SET
By DAN GOODALE

Have you ever needed the character codes for any of the lower case letters? If you're like me you just whipped out the manual, turned the page to the proper section.....and found that they weren't listed in the manual! Bytes the big one doesn't it? So I was quite relieved when I stumbled across a complete listing of the character codes (as T.I. uses them anyway) They are as follows:

CODE	KEY	CODE	KEY	CODE	KEY
0					
1	FCTN 7	68	D	135	CTRL G
2	FCTN 4	69	E	136	CTRL H
3	FCTN 1	70	F	137	CTRL I
4	FCTN 2	71	G	138	CTRL J
5	FCTN =	72	H	139	CTRL K
6	FCTN 8	73	I	140	CTRL L
7	FCTN 3	74	J	141	CTRL M
8	FCTN S	75	K	142	CTRL N
9	FCTN D	76	L	143	CTRL O
10	FCTN X	77	M	144	CTRL P
11	FCTN E	78	N	145	CTRL Q
12	FCTN 6	79	O	146	CTRL R
13	ENTER	80	P	147	CTRL S
14	FCTN 5	81	Q	148	CTRL T
15	FCTN 9	82	R	149	CTRL U
16		83	S	150	CTRL V
17		84	T	151	CTRL W
18		85	U	152	CTRL X
19		86	V	153	CTRL Y
20		87	W	154	CTRL Z
21		88	X	155	CTRL .
22		89	Y	156	CTRL ;
23		90	Z	157	CTRL -
24		91	[158	CTRL 8
25		92	\	159	CTRL 9
26		93]	160	
27		94	^	161	
28		95	_	162	
29		96	`	163	
30	CURSOR	97	a	164	
31	BORDER	98	b	165	
32	SPACE	99	c	166	
33	!	100	d	167	
34	"	101	e	168	
35	#	102	f	169	
36	\$	103	g	170	
37	%	104	h	171	
38	&	105	i	172	
39	'	106	j	173	
40	(107	k	174	
41)	108	l	175	
42	*	109	m	176	CTRL 0
43	+	110	n	177	CTRL 1
44	,	111	o	178	CTRL 2

CODE	KEY	CODE	KEY	CODE	KEY
45	-	112	p	179	CTRL 3
46	.	113	q	180	CTRL 4
47	/	114	r	181	CTRL 5
48	0	115	s	182	CTRL 6
49	1	116	t	183	CTRL 7
50	2	117	u	184	FCTN ,
51	3	118	v	185	FCTN .
52	4	119	w	186	FCTN /
53	5	120	x	187	CTRL /
54	6	121	y	188	FCTN 0
55	7	122	z	189	FCTN ;
56	8	123	{	190	FCTN B
57	9	124		191	FCTN H
58	:	125	}	192	FCTN J
59	;	126	~	193	FCTN K
60	<	127	FCTN U	194	FCTN L
61	=	128	CTRL ,	195	FCTN M
62	>	129	CTRL A	196	FCTN N
63	?	130	CTRL B	197	FCTN O
64	@	131	CTRL C	198	FCTN V
65	A	132	CTRL D		
66	B	133	CTRL E		
67	C	134	CTRL F		

Many of these character codes aren't used during day to day computer use but may come into play during computer to computer communications and data transfer or as control codes to your printer. (Special characters sent to the printer commanding it to use expanded or compacted print, graphics, etc.) Also some codes may be used in special application or commercial software to mark file ends or special commands. And of course devious programmers can use specially defined characters for applications too numerous to mention. Certain character codes are also used for token commands.

This wraps up our article on character codes. As I am no expert it is possible that there are errors or gaps in my knowledge of the T.I. character set.



Continued from Page 7
Replacing a TI-99/4A
Keyboard

should not touch the keyboard assembly but be tucked into the empty space above the motherboard.

Once the keys check out replace all four screws on the keyboard.

Relocate the power board, make sure that the ON/OFF switch connects properly. If necessary, lift the board just a little and observe the switch action. Once the switch works properly, secure the power board with its two screws.

Replace the console bottom cover. Make sure that it lines up properly with the top before replacing the screws. Seat all seven screws and then tighten by working over across.

Your replacement Keyboard is now installed and should be working properly. Don't throw away your old keyboard just yet. If it has only a few keys that refuse to work, take it to your friendly radio or TV repair man. Quite often the judicious application of contact cleaner and a general cleaning can restore a balky keyboard to pristine health.

Please remember - YOU try all hardware projects at your own risk!

END

This story comes from THE ICON 11/97 Newsletter
I thought that it is just in time for the holidays.

The Reverend's wife tells about her day:

The other day I went to the local religious book store where I saw a "HONK IF YOU LOVE JESUS" bumper sticker. I bought it and put it on the back bumper of my car, and I'm really glad I did. What an uplifting experience followed!

I was stopped at the light of a busy intersection, just lost in thought about the lord, and didn't notice that the light had changed. That bumper sticker really worked! I found lots of people who love Jesus. Why, the guy behind me started to honk like crazy. He must really love the lord, because pretty soon he leaned out the window and yelled, "JESUS CHRIST!" as loud as he could. It was like a football game, with him shouting, "GO, JESUS CHRIST, GO!!" Everyone else started honking too, so I leaned out my window and waved and smiled to all those loving people. There must have been a guy from Florida back there because I could hear him yelling something about a sunny beach, and I saw him waving a funny way with only his middle finger stuck up in the air. I recently asked my two kids what that meant. They kind of squirmed, looked at each

other, giggled, and told me that was the Hawaiian goodluck sign. So I leaned out the window and gave him the good luck sign back.

A couple of people were so caught up in the joy of the moment that they got out of their cars and walked towards me. I bet they wanted to pray, but just then I noticed that the light had changed, and I stepped on the gas. It's a good thing I did, because I was the only car to get across the intersection, I looked back at them standing there. I leaned out the window, gave them a big smile, and held up the Hawaiian good luck sign as I drove away.

Praise the lord for such wonderful folks!!

Received by e-mail from Ray Roots of Wichita, Kansas.

END

THE ORPHAN

The TI 99/4A, alias, "THE ORPHAN" as it is quite often called in many newsletter articles, is still going, and going, like the BEVEREADY RABBIT. Also quite a few TI clubs have bitten the dust since the early 90's. Some of the NL state that only two members show up at the meetings.

Allmost all of our club are Senior Citizens and losing interest or passing on, to the TI clubs in

Haven, yes they're up there but the internet cannot reach them.

We the WEST PENN 99'ers still have a strong club, with eight to fifteen members attending the meetings. We boast a healthy membership of 23, and still more signing up.

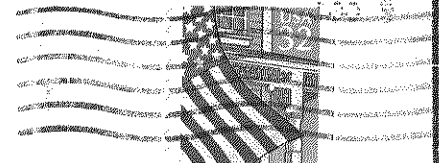
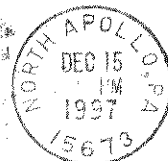
One perspective member, from Texas, states that he even attend a few meetings in person, hay, now thats dedication. Also a new member just signed up for the NL, Janice Brooks from the 19079 zip code area, welcome aboard, Janice.

So, all you tired TI'ers all over the U.S. of A. and any former club members, we are accepting full and Newsletter Applications, which are \$15. and \$10. respectively. Full membership privileges include free copying of any disk in our library of well over 3000 disks. You only have to a mailer, blank disk, and return postage.

If you don't use the TI, pass it along to a family member, friend, adult or teenager, I'm sure they would be happy to get it. (Notice that "IT" is "TI" spelled backwards). I am sure if your TI is broke someone in our club can

fix it or replace it. Send all inquires to me, Paul Brock-Pres. WEST PENN 99'ERS, P.O. Box 222 North Apollo, Pa. 15673-0222
END
Wow! WANT THOSE TI'ERS A LOT FOR CHRISTMAS

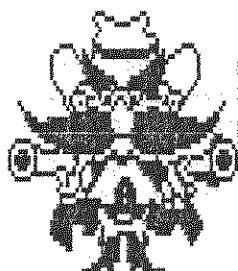
WEST PENN 99'ERS
C/O Paul A. Brock
P.O. BOX 222
North Apollo PA 15673-0222



Newsletter Editors

Please note new address
and up date your mailing list

FIRST CLASS MAIL



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RUSSELLTON, PA 15076
USA



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15076-1322 01

This newsletter was composed in it's intrnety
using a TEXAS INSTRUMENTS TI-99/4A computer

NEXT

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