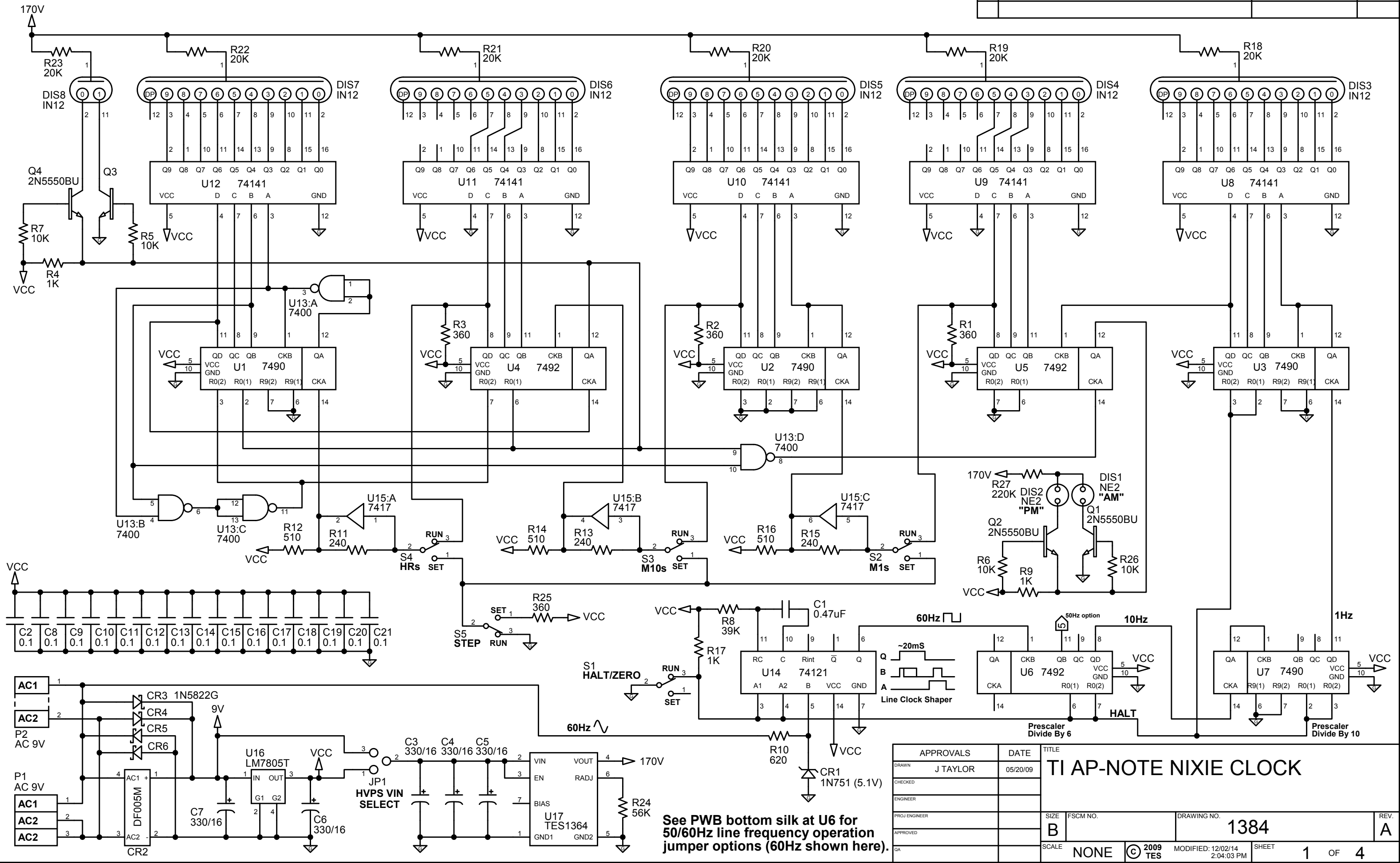
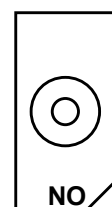


NOTES: UNLESS OTHERWISE SPECIFIED

REVISION HISTORY			
REV	DESCRIPTION	APPROVED	DATE



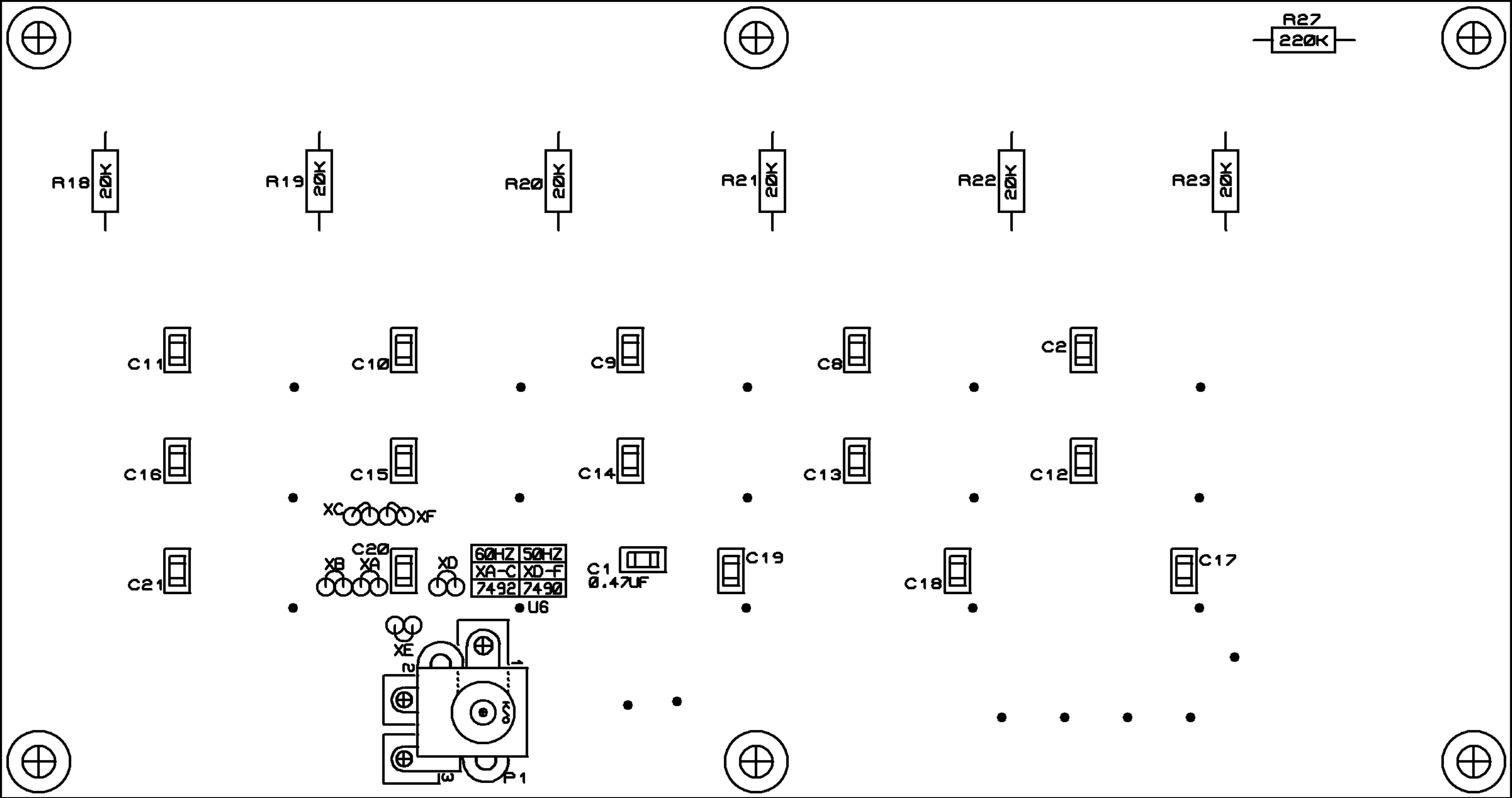
APPROVALS		DATE	TITLE		
DRAWN	J TAYLOR	05/20/09	TI AP-NOTE NIXIE CLOCK		
CHECKED					
ENGINEER					
PROJ ENGINEER					
APPROVED					
QA					
SCALE		NONE	© 2009 TES	MODIFIED: 12/02/14 2:04:03 PM	SHEET 1 OF 4



APPROVALS		DATE	TITLE					
DRAWN	J TAYLOR	05/20/09	TI AP-NOTE NIXIE CLOCK					
CHECKED								
ENGINEER								
PROJ ENGINEER			SIZE B	FSCM NO.	DRAWING NO. 1384	REV. A		
APPROVED								
QA			SCALE NONE	© 2009 TES	MODIFIED: 12/02/14 2:04:03 PM	SHEET 2	OF 4	

NOTES: UNLESS OTHERWISE SPECIFIED

REVISION HISTORY			
REV	DESCRIPTION	APPROVED	DATE



APPROVALS		DATE	TITLE						
DRAWN	J TAYLOR	05/20/09	TI AP-NOTE NIXIE CLOCK						
CHECKED									
ENGINEER									
PROJ ENGINEER			SIZE	FSCM NO.		DRAWING NO.		REV.	
APPROVED			B			1384		A	
QA			SCALE	NONE	© 2009 TES	MODIFIED: 12/02/14 2:04:03 PM		SHEET	3 OF 4

1. Seconds 10's decoder to nixie connections changed to match minutes 10's: Upper 3 bits of 7492 count 0,1,2,4,5,6 and not 0,1,2,3,4,5.
2. Changed AM/PM driver to NE2 from incandescent for aesthetics.
3. Connected HALT switch to seconds and prescaler reset to zero them to allow easier exact second alignment on release (S1).
4. Changed high voltage from transformer output to boost module.
5. Changed 5V supply from zener shunt to LM7805 to improve performance and eliminate power resistor.
6. Selected Q output on one 74121 one-shot.
7. Minutes 1's 7490 counter shows R0(1)/R0(2) twice, second set should be R9(1)/R9(2).
8. Increment resistor changed to 360 ohms from 330 (S5).
9. Anode resistors changed to 20K for IN12's running at 170V.

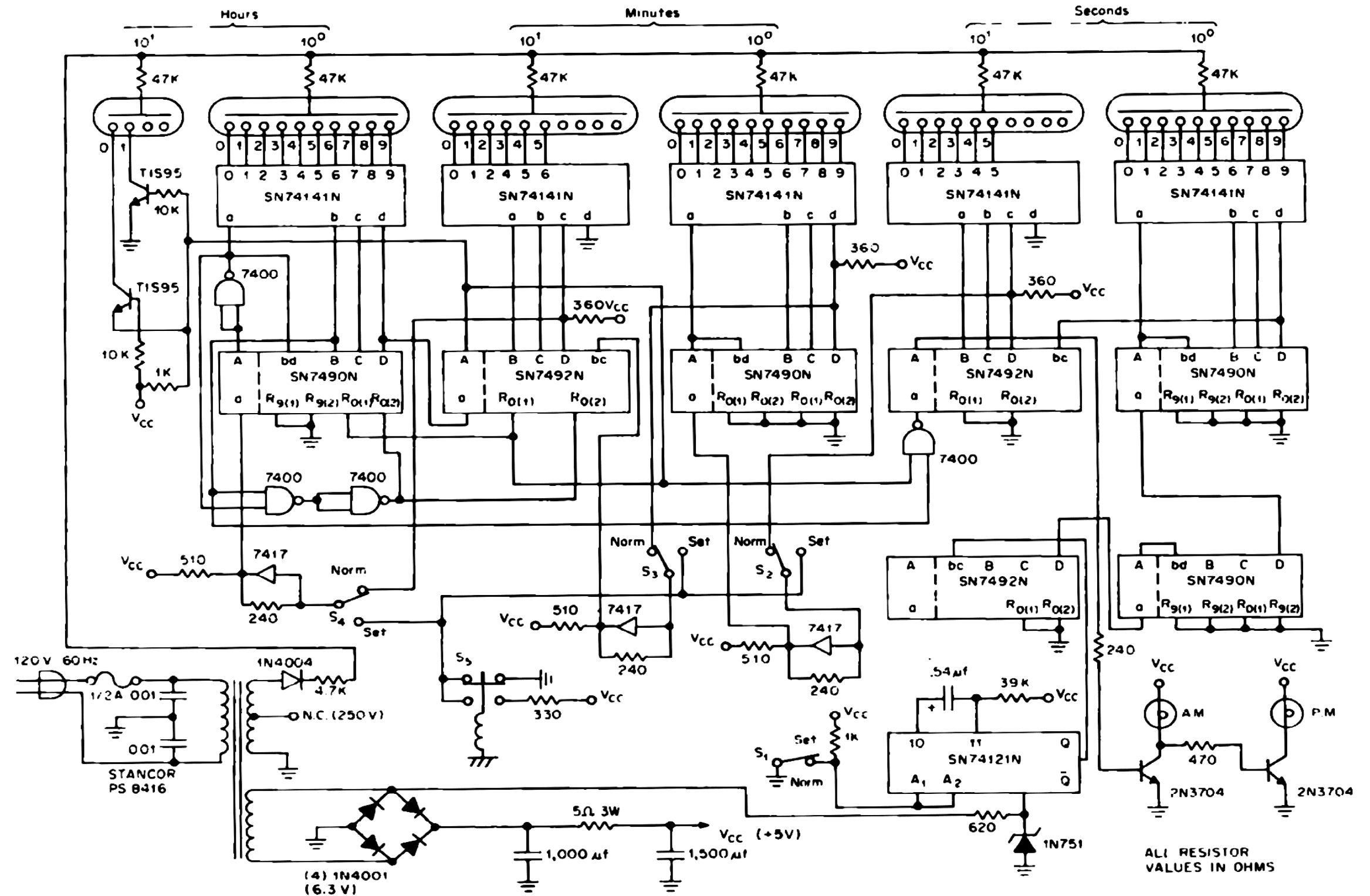


Fig. 12.4. 12-hour digital clock.

APPROVALS		DATE		TITLE			
DRAWN J TAYLOR		05/20/09		TI AP-NOTE NIXIE CLOCK			
CHECKED							
ENGINEER							
PROJ. ENGINEER				SIZE	FSCM NO.	DRAWING NO.	REV.
				B		1384	A
APPROVED							
QA				SCALE		© 2009 TES	MODIFIED: 12/02/14 2:04:03 PM
				NONE			SHEET 4 OF 4