

13" COLOR GAME MONITOR SCHEMATIC DIAGRAM

Williams

No. 16-3000-AMD-4
September, 1982

MANUAL AMENDMENT

MANUAL AFFECTED: 16-3000-100 MONITOR MANUAL
KEEP THIS SHEET WITH YOUR MONITOR MANUAL

PURPOSE: Improvements to 19" Type A Monitors; New 19" and 13" Type A Schematics

CHANGES ON ALL TYPE A MONITORS

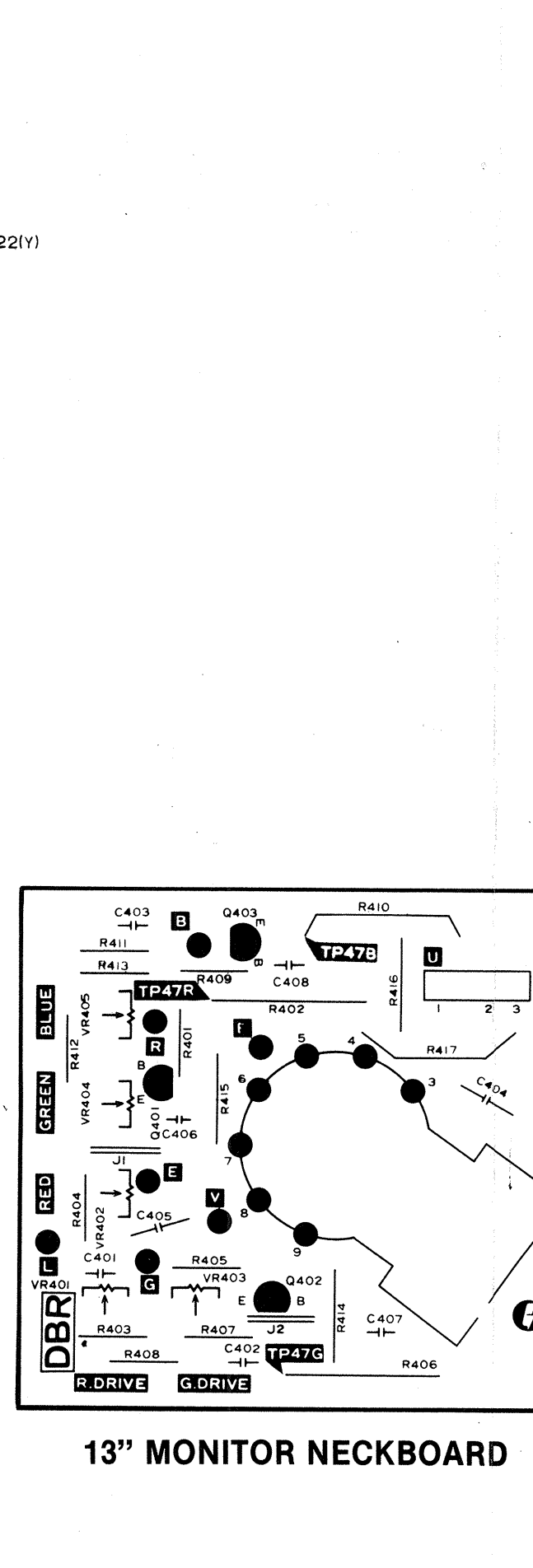
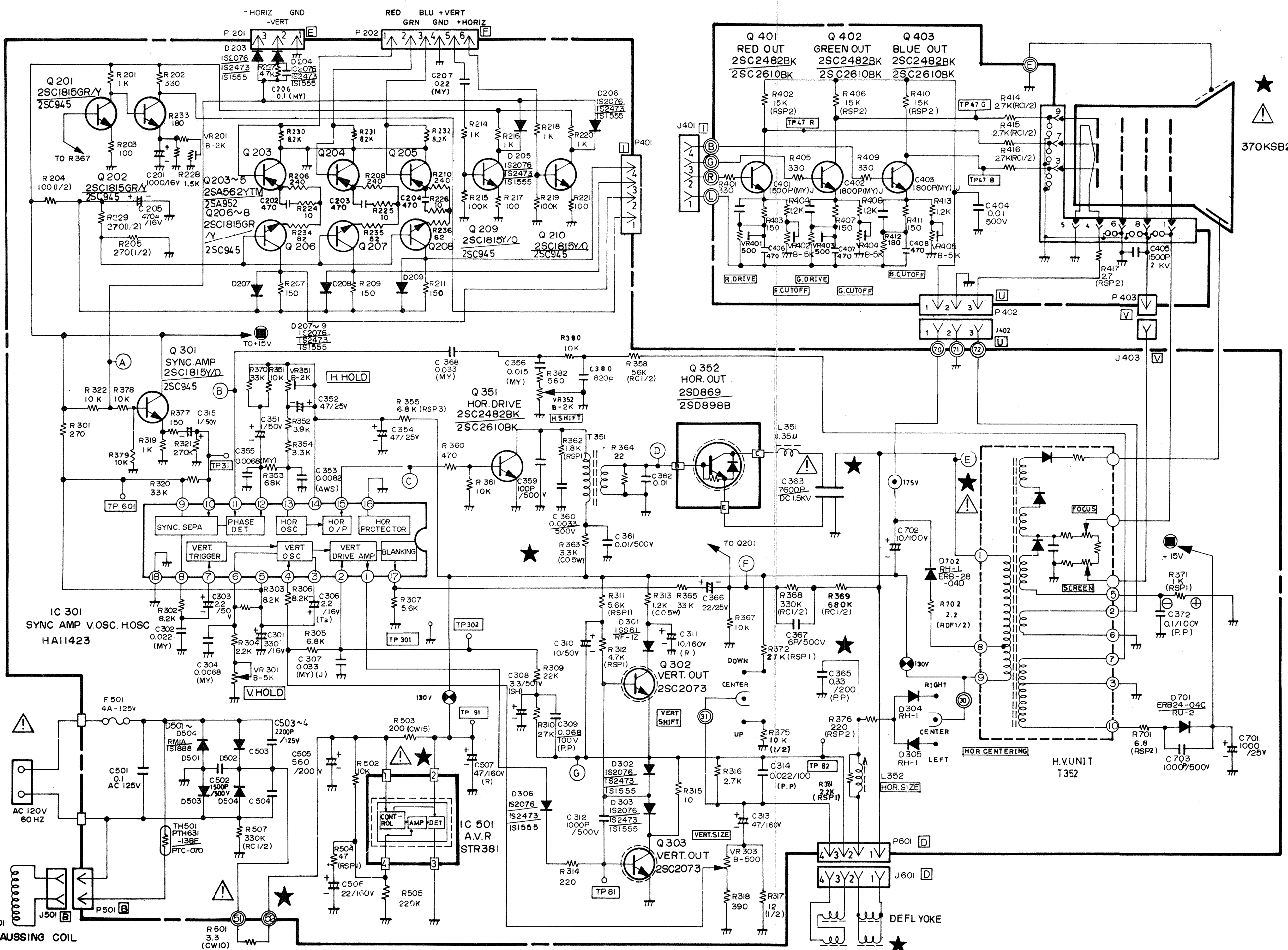
Several improvements have recently been made to the sweep circuits of 19" Type A monitors. DIFFERENCES INCLUDE (1) & (2) the addition of one or two resistors in the vertical sweep section of some monitors (depending on the vertical linearity measurement made by the factory); (3) a new deflection yoke and (4) the addition of a VERTICAL DAMPING control beside the VERTICAL HOLD control at the back of the monitor. Your monitor is the new type if it has this VERTICAL DAMPING control.

- If it applies to your monitor, pencil this change in on the attached 19" schematic set:
 - (1) Add an 82K, 1/4W resistor across C309. 19" monitors with a 7.5K resistor at position R306 (Pin 4 of IC301) will NOT have the 82K resistor.
 - (2) Note the following:
 - (3) 3.9K, 1/4W resistor R316 shown across capacitor C314 is now used in some 19" monitors.
 - (4) Yoke Replacement
Deflection yokes with part numbers 202-111-1258 and 202-111-1264 must be used ONLY with the new Type A chassis. They are NOT interchangeable with deflection yokes numbered 202-111-1194 or 202-111-1201.
 - (5) ADJUSTING THE VERTICAL DAMPING CONTROL
This control allows more lines of video to be displayed in games where these lines are used. Adjustment of the VERTICAL DAMPING control is important only if the VERTICAL SIZE is set so that the additional lines appear on the screen.
 - (A) Turn up the BLACK LEVEL control so that the raster lines can be seen.
 - (B) Adjust the VERTICAL DAMPING control so that the top raster lines are spaced uniformly and not folded over.
 - (C) Return the BLACK LEVEL control to the desired setting.

CHANGES ON MOON PATROL 19" TYPE A MONITORS

DIFFERENCES INCLUDE (5) the substitution of a lower-value capacitor for another capacitor in the horizontal sweep section, and (6) the deletion of a jumper wire also in the horizontal sweep section.

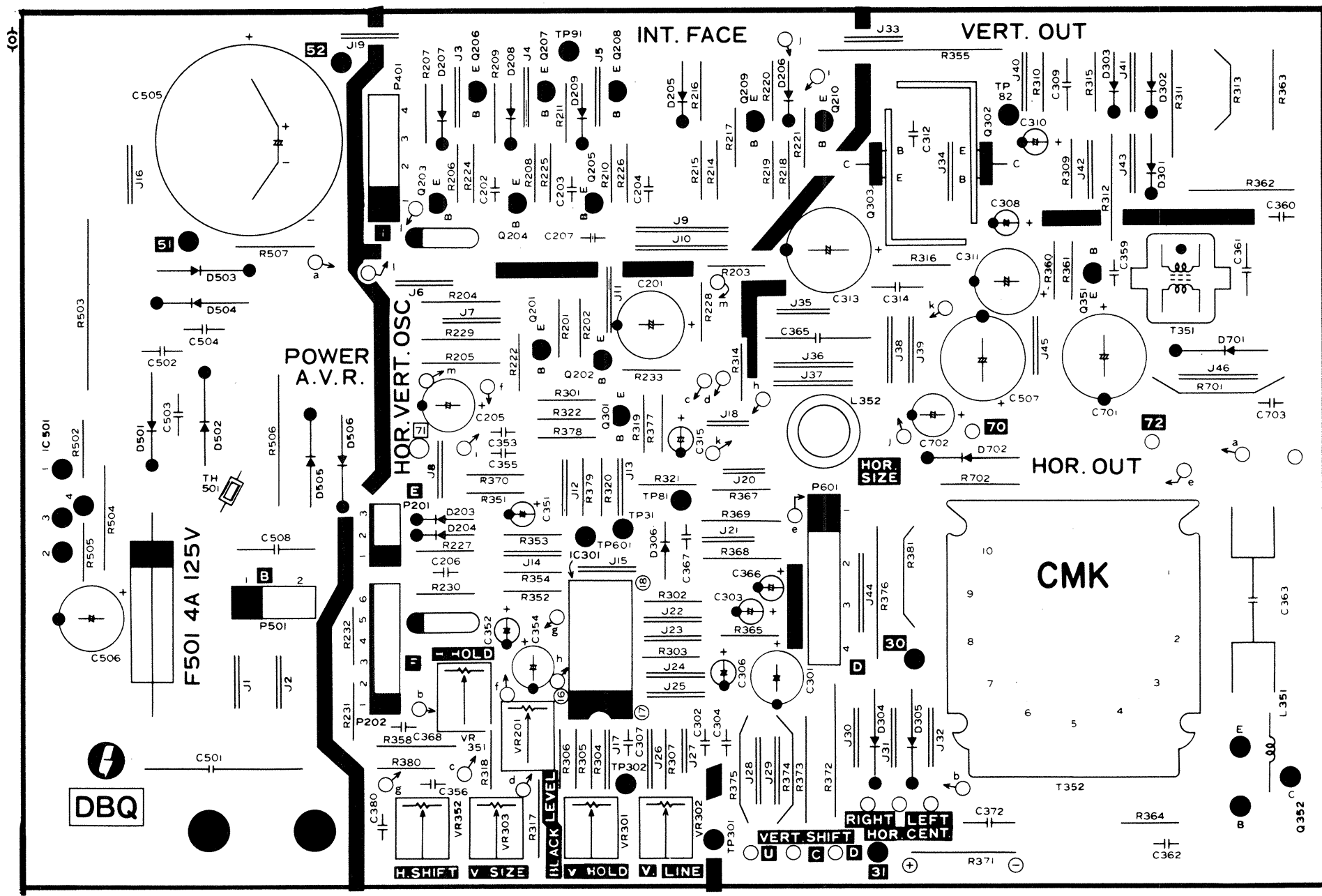
- Note these changes in the attached 19" schematic set:
 - (5) The value of electrolytic capacitor C365 is 0.15 uF/400V (Monitors for games other than MOON PATROL substitute a 0.33 uF/200V capacitor here).
 - (6) The horizontal-centering jumper has been deleted at point 30 from MOON PATROL monitors ONLY.



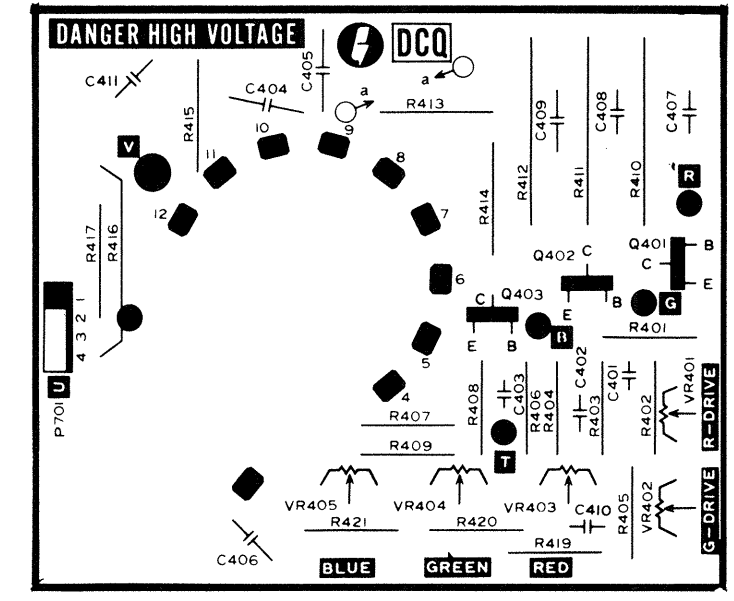
13" MONITOR NECKBOARD

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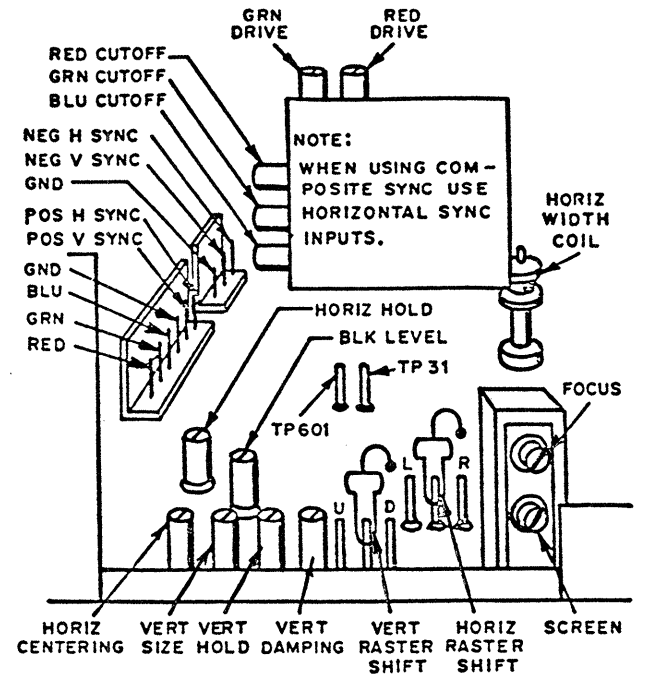
3401 N. California Ave., Chicago, IL 60618



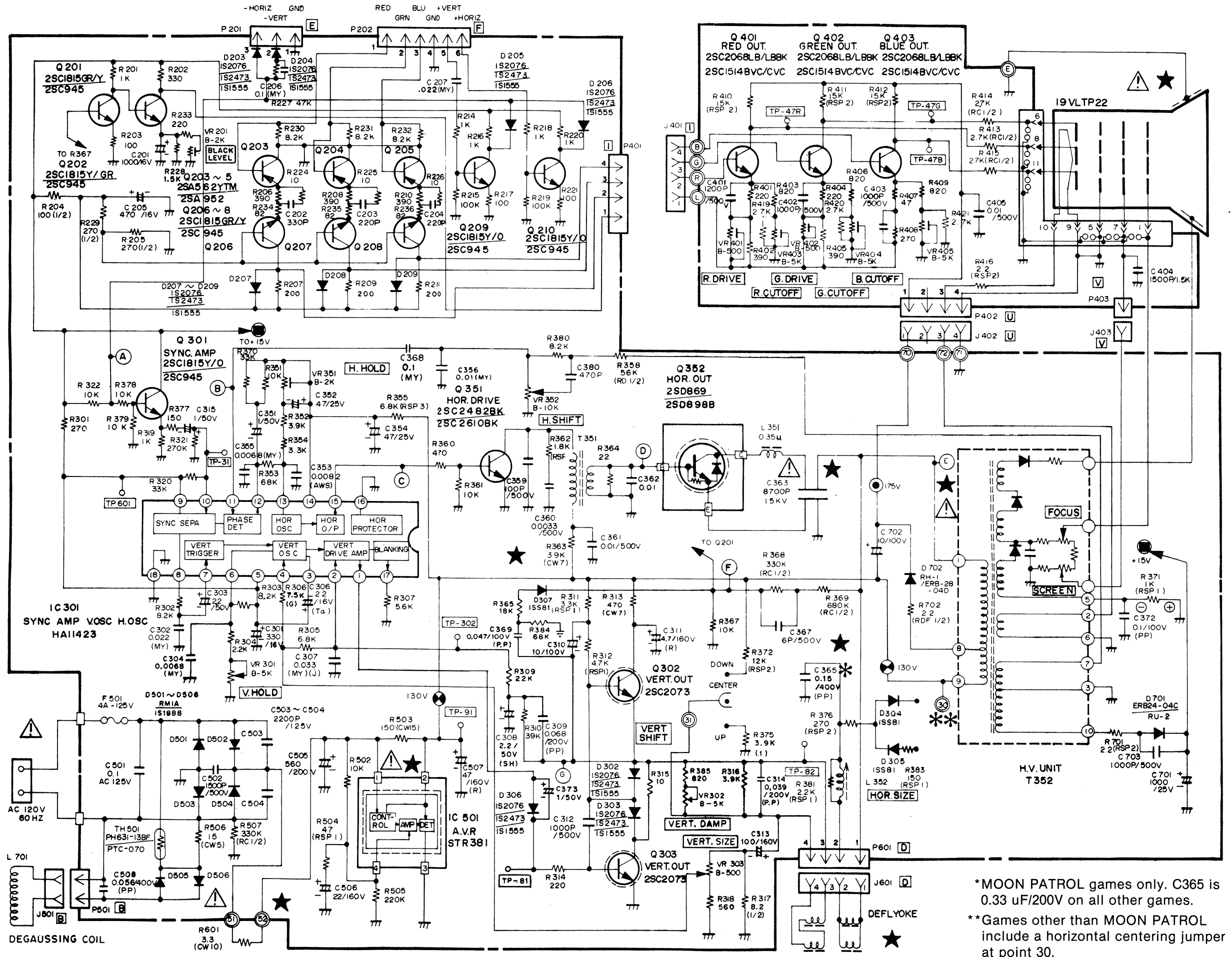
13" AND 19" MONITOR MAIN BOARD



19" MONITOR NECK BOARD



19" COLOR GAME MONITOR SCHEMATIC DIAGRAM



*MOON PATROL games only. C365 is 0.33 uF/200V on all other games.
 ** Games other than MOON PATROL include a horizontal centering jumper at point 30.