

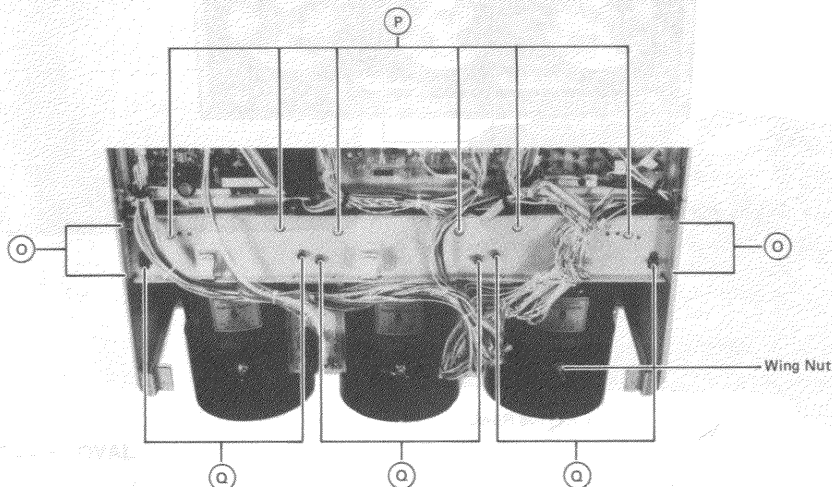
CRT REPLACEMENT PROCEDURE

Caution:

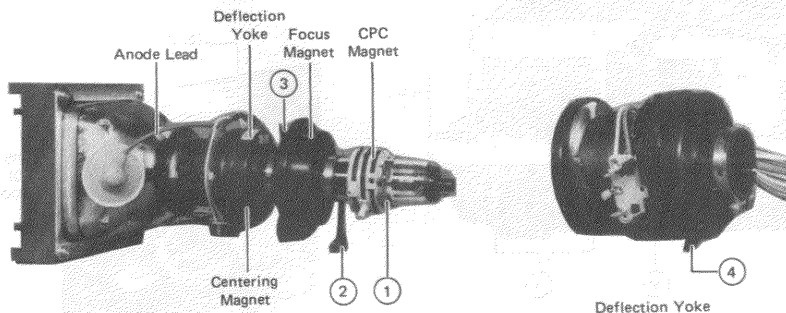
- (1) Use extreme care when replacing the CRT. Avoid scratching the CRT; scratches will degrade its reliability.
- (2) Do not attempt to remove the anode lead from the CRT. The CRT is supplied with the anode lead permanently attached.

CRT Removal

- (1) Remove the 4 side screws (O) and the 6 top screws (P).
- (2) Remove the 2 shafts (Q) which fix the CRT to be replaced.
- (3) Remove the CRT PWB from the end of the CRT neck.



- (4) Loosen the screw (1) which mounts the CPC magnet and remove it.
- (5) Loosen the screw (2) and ring (3) which mount the FOCUS magnet and remove it.
- (6) Loosen the screw (4) which mounts the DEFLECTION YOKE and remove it.



- (7) Unplug the anode lead from the High voltage unit.
- (8) Remove the 2 screws (K) which mount the chassis. Refer to page 34.
- (9) Lift up the chassis and pull the anode lead through under the chassis.
- (10) Lift up and pull out the CRT toward you.

New CRT Assembly

Reverse the procedure above.

Adjustment After Replacing CRT (Example Green CRT)

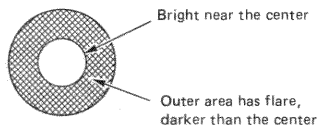
- Notes:**
1. When a CRT is replaced with a new one, readjustment for only that color may be necessary. In the case of the green CRT, green dynamic convergence should be adjusted according to the red CRT.
 2. Do not rotate the controls other than those associated with the CRT which was replaced unless required.

1. Raster Position Adjustment

- (1) Unplug connector "C" on the CF DRIVE PWB. The convergence values will be set to zero.
- (2) Display a crosshatch pattern.
- (3) Cut-off the Red and Blue CRTs to display only Green.
- (4) While pushing the deflection yoke toward the CRT, rotate it so that the pattern on the screen is positioned horizontally.
- (5) Tighten the deflection yoke set screw.
- (6) Display the Red and Blue.
- (7) Adjust the centering magnets (located on the rear of the yoke) of the green CRT so the green image is centered within the green CRT. Turn down the BRIGHTNESS in order to look into the CRT to center image.

2. C.P.C. (Convergence and Purity Control) Magnet Adjustments for FOCUS

- (1) Display only the G-CRT, then turn down BRIGHTNESS with the remote controller until the raster becomes dark.
- (2) Adjust G. CENTER FOCUS with the remote controller so the flare appears on the spot. The center should be bright (core) and the surrounding area has flare.



- (3) Adjust the 2 pole magnet so a core appears in the center of the flare.
- (4) Adjust the 4 pole magnet so the flare becomes a circular shape.
- (5) Adjust G. CENTER FOCUS with the remote controller so the flare disappears.
- (6) Adjust the R-CRT and B-CRT in the same manner.

3. Dynamic Convergence Adjustment

- (1) Unplug connector "C" on the CF DRIVE PWB.
- (2) Carry out Dynamic Convergence as explained on page 17.

LENS CLEANING PROCEDURE

To minimize the possibility of damaging the optical coating or scratching exposed lens surfaces, we recommend you to try to remove any material from the lens by blowing it off with deionized air or *lightly* brushing it with a soft, camel's hair brush.

Multilayer Coating Lenses

- (1) DO NOT spray any fluid directly on the lens surface.
- (2) DO NOT use any dry material to clean the surface (dry rag, tissue, etc.).
- (3) Use a commercial liquid window cleaner (such as Sparkle or Glass Plus). DO NOT use any aerosol. Other cleaning agents, such as laboratory grade acetone or ethyl ether - ethyl alcohol (70-30) may also be used.

- (4) Use a soft cotton cloth (cotton diapers laundered several times to remove sizing) or any soft facial tissue.
- (5) When using window cleaner, moisten the cloth or tissue and lightly wipe the surface. Then lightly dry with a new tissue.

	RECOMMENDED	NOT RECOMMENDED
Solvents	Mild Liquid window cleaner	Direct spraying of any fluid. Aerosol
Cloth	Cotton Soft tissue	Dry cloth or tissue