REMOVAL OF OLD CHASSIS (ELECTROHOME OR DISCO)

STEP 1: Discharge the CRT. To remove the High Voltage Anode from the bell housing of the picture tube you must discharge the stored voltage to ground. To do this use a small screw-driver with an insulated handle and a test wire with ‘gator clips’ on each end. Attach one of the clips to the metal part of the screw-driver and the other to the metal frame of the monitor. Slide the screw-driver under the rubber boot of the H.V. Anode so that it touches the metal contact. You may now remove the H.V. Anode from the CRT.

STEP 2: Removing the remaining plugs, wires and connectors.

A: remove the ground wire from the CRT neck board. If this is soldered cut the wire as close to the old neck board as possible. A ground wire may also need to be removed from the main chassis.

B: Unplug the CRT socket from the CRT. Be careful not to bend the pins on the CRT.

C: Disconnect the YOKE plug from the old chassis.

D: Disconnect the input signal wires (Red, green, blue, etc.) and the degaussing coil plug.

E: Disconnect the AC Voltage plug.

F: Remove any screws that secure the old chassis to the frame and remove the old chassis. Watch for any wires still possibly attached.

INSTALLING YOUR ETGO CHASSIS:

A: ELECTROHOME 19" 07

STEP 1: Remove your new ETGO chassis from the shipping container. You will find a ground strap (Wire braid and black wire), a Yoke plug and wires (red, green, yellow and blue wires) and Input plug and wires (red, green, blue, black and white). The ground strap and Yoke plug/wires are extra and won’t be needed unless they are missing from your old monitor. Inspect your new ETGO chassis for any shipping damages.

STEP 2: Mounting the new chassis to the frame. There are basically two types of Electrohome frames, one has spring type clips that support the back of the chassis and the other has rigid metal supports. Install your new chassis into the frame so that the controls (White level, Vert size, etc.) are accessible from the back of the monitor or so the power plug and input plug (P401) are towards the front of the picture tube. Rest the rim of the chassis into the support clips and set the chassis atop the metal extrusions (where the screws were on the Electrohome chassis).

If you have the spring type supports push the chassis in until it is flush with the frame. Mark the frame where the screw slots will hit so holes can be drilled for screws. Remove your chassis and drill two holes for screws. Reinstall the chassis and secure with two sheet metal screws (Not Provided). Do not tighten the screws to where the chassis tries to pull away from the extrusions it is resting on.

This figure represents the hole(s) to be drilled in the frame for mounting the chassis. This is for installation with the spring type clips.
If your monitor frame is the type with rigid metal clips your chassis will extend over the edge of the frame when it is installed. To secure your chassis you will need to make a small clamp that will hold the chassis to the frame. Try something like this:

B: DISCO 19-INCH COLOR RASTER DISPLAY

STEP 1: Follow the Step 1 information listed under Electrohome.

STEP 2: Mounting the new chassis to the frame. Your new EYGO chassis will fit snugly into the DISCO frame. Install your chassis into the frame so the controls (White level, Vert size, etc.) are accessible from the back of the monitor or so the power plug and input plug (P401) are towards the front of the picture tube. Slide the rim of your new chassis into the brackets (Front of tube) and slide the sides between the extrusions (Where the screws were on your old chassis). Adjust the chassis so it fits flush and doesn't overlap the rear of the frame. (See figure below).

Once the chassis is in the desired position, mark the two rear screw holes and then remove your chassis to drill. Use a drill that will accommodate for sheet metal screws. After drilling, reinstall your chassis and secure with the sheet metal screws (not provided).

CONNECTING THE PLUGS

NOTE: USE THE CONTROL LOCATION AND ADJUSTMENT PAGE TO HELP LOCATE THE PLUGS AND CONNECTORS.

STEP 1: Connect the deaussing plug to connector on the board. Either of the wires can go to either of the plugs as it is not polarized.

STEP 2: Connect the input plug (white plug) to P401. This plug will only fit one way.

STEP 3: Plug the neck board on to the CRT socket. DO NOT FORCE THE PLUG TO FIT. If the neck board does not connect easily, check for bent pins.

STEP 4: Connect the ground wire from the CRT harness to the pin on the neck board (CRT Socket). If the pin and connector do not mate, you can slide the ground pin in-between the plastic cover and the metal clip on the ground wire. You may have to solder this wire for a good connection. If you have more than one ground wire on the CRT harness cut the extra off as there is not another ground connection on the new chassis.

STEP 5: AC Input. Do not plug the AC cord into an electrical outlet without using an isolation transformer. Testing, operating or troubleshooting this chassis without an isolation transformer will void the warranty. Cut the AC plug off and modify the cord to match the old AC cord on the chassis you are replacing. DO NOT CONNECT THIS PLUG YET!

STEP 6: YOKE PLUG

Step 6A will cover the yoke plug for the Electrohome. Step 6B will cover this procedure for the DISCO.
A. ELECTROHOME

ELECTROHOME G07-19" TYPE YOKE PLUG

RED   GREY WHITE BROWN

WIRES

1  2  3  4  5

CUT HERE

Cut and separate the plug according to the figure. You should have 4 separate plugs with wires attached. Discard the one marked (1). (No wire). Label the RED and WHITE wires as the HORIZONTAL YOKE WIRES. Label the GREY and BROWN as the VERTICAL YOKE WIRES. **WARNING** Do not connect the vertical wires to the horizontal pins and do not connect the horizontal wires to the vertical pins. **FAILURE TO CONNECT THE YOKE WIRES CORRECTLY WILL VOID YOUR WARRANTY.** There are 5 pins on the EYGO chassis that can be used for the yoke plug. Only 4 will be used at one time.

See figure P402.

**SUGGESTED CONNECTION FOR PLUG P402**

![Diagram]

**NORMAL PICTURE**

**INVERTED PICTURE**

***SEE CONTROL LOCATION PAGE FOR ORIENTATION***

Letters do not appear on the EYGO chassis. The numbers are located on the side of the Electrohome yoke plug. Make sure you are viewing your chassis with the same orientation as the illustration, otherwise the wires may be connected incorrectly. Never change or disconnect any of the yoke plugs while the chassis is on.

(1) RED  WIREF TO EITHER C OR O  (H.DT. SIDE ONLY)
(4) WHITE  WIREF TO EITHER D OR H  (H.DT. SIDE ONLY)
(3) GREY  WIREF TO EITHER A OR E  (V.DY. SIDE ONLY)
(5) BROWN  WIREF TO EITHER B OR F  (V.DY. SIDE ONLY)

At this point, check all of your connections. You may now power your chassis. Refer to troubleshooting if the chassis fails to operate.

If your picture is upside down, reverse the grey (3) and brown (5) wires.
If your picture is backwards, reverse the red (1) and white (4) wires.
STEP 6B: DISCO 19" Tyve Yoke Plug will connect directly onto the EYGO chassis without modification. It will only fit one way.
At this point after checking your connections, you may power up your new chassis. If the chassis fails to operate, refer to the troubleshooting section. If after powering your chassis the image is inverted or upside down, try the other set of yoke pins. Never disconnect or change any of the yoke pins while the chassis has power. If your picture is upside down only, check your game board for a dipswitch setting that will flip the image. If the above procedures do not correct the image, modify the yoke plug as follows:

The yoke plug should still only fit onto the EYGO chassis one way. The smaller of the two plugs will only fit on the Vertical (V DY). The horizontal plug (the larger) will only fit the pins marked (H DY). To correct the picture, you will need to rotate either or both of the plugs 180 degrees, or move the plug(s) to the other row of pins.

Plug Options for DISCO

If your game board does not provide a negative composite sync signal you can use one of the following circuits. Below are some circuits that will convert most types of sync to a negative composite sync signal.

For the circuits below, use a 7402, 74LS02 or a 74HC02. To power the chip, you can piggy-back on to another 74 series chip (on the same board) and use its power pins (7 ground and 14 is VCC.) or find a spare or blank on the board.

This circuit converts Positive Horiz. and Vert. to Negative Composite.

POSITIVE HORZ. → NEGATIVE COMPOSITE
POSITIVE VERT. → NEGATIVE COMPOSITE

This circuit uses Negative Horiz. and Vert. to convert to Negative Comp.

NEGATIVE HORZ. → NEGATIVE COMPOSITE
NEGATIVE VERT. → NEGATIVE COMPOSITE

If you have a Positive Composite sync, use this circuit for inverting

POSITIVE COMPOSITE → NEGATIVE COMPOSITE