

## DRIVING CONTROLLER

The heart of the driving controller is a switching device that generates a full two-bit gray code for each quarter turn of the controller knob. The output of both the gray code generator and the pushbutton switch is detected by the 6532, causing the program to respond accordingly. Unlike the non-linear resistive game paddles, the driving controller gives the user precise linear positional control over the complete turning range of the knob. As with the game paddles, there is a simple push-to-make pushbutton switch located on the side of the controller. The driving controller assembly is illustrated in Figure 7-5; the schematic in Figure 7-6.

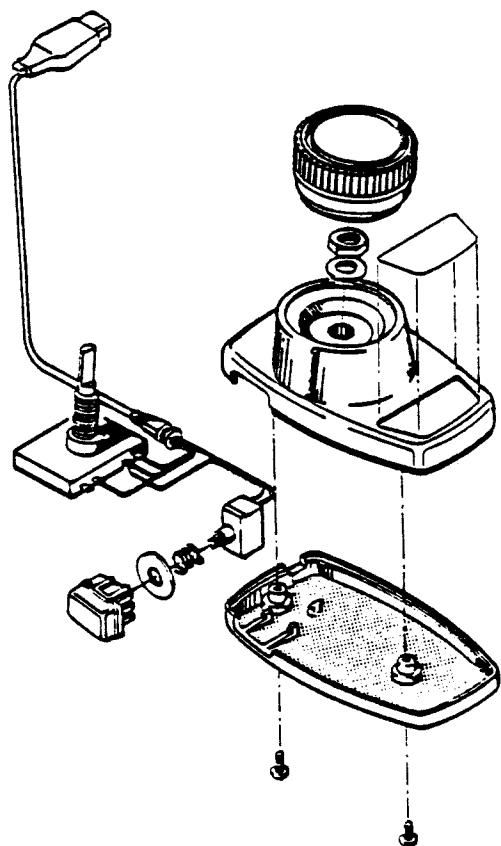


Figure 7-5. Driving Controller

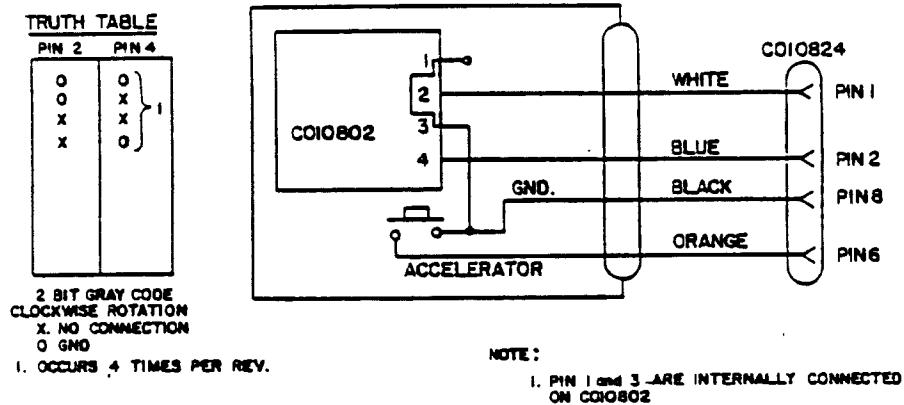


Figure 7-6. Driving Controller Schematic

### DRIVING CONTROLLER CHECK

#### Equipment Needed

- T.V. set
- Known good VCS unit
- Indy 500 cartridge

#### Procedure

1. Plug in Indy 500 cartridge and plug in driving controller to be tested in left hand port.
2. Press game reset switch.
3. Turn controller knob and insure that car turns in the same direction as the knob. Insure that car doesn't skip position or wobble between positions. There should be 16 different positions for the car.
4. Press down on the knob and lightly wiggle it back and forth. The car should not move at all.
5. Press down on the red button. The car should move forward.
6. If the controller fails any of the above tests it is defective.