GRAN TRAK 10

OPERATING AND MAINTENANCE MANUAL

ATARI™
Innovative leisure

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A. INTRODUCTION AND WARRANTY INFORMATION

Gran Trak 10 is a coin operated video amusement device which simulates the experience of driving a high speed race car around a difficult track. All the machine controls (steering, gear shift, accelerator and brakes) behave like those of a real car.

The electronics of this game are solid state for long life and low maintenance. The mechanical assemblies (steering, gear shifter and pedals) have been designed modularly for easy removal and servicing.

However, as with all devices mechanical or electrical, there may be minor problems. *If the printed circuit board computer (PCB) fails within the warranty period, contact the distributor from whom the game was originally purchased* for repair or replacement instructions.

Any PCB repair attempted by anyone other than authorized Atari Service Center personnel will void the PCB warranty.

If the PCB fails *after* the one-year (from date of factory shipment) warranty period has expired, it will be repaired for a nominal parts and labor charge.

Atari, Inc. warrants the T.V. monitor for a period of thirty days commencing the day of shipment from the Atari factory. *If the monitor fails within the warranty period, immediately contact the distributor from whom the game was originally purchased for repair or replacement instructions. Any T.V. repairs other than replacement of fuses or minor adjustments attempted during the warranty period by anyone other than authorized Atari Service Center Personnel will void the T.V. monitor warranty.*

If the T.V. monitor fails *after* the warranty period has expired, it may be returned to the distributor where it will be repaired or replaced for a nominal parts and labor charge, or it may be taken to any competent T.V. repair shop.

B: ACCESS AND BASIC CONSTRUCTION

Three openings: Coin door, rear door and a swing-out front control panel—provide convenient access to all sub-assemblies and adjustment points. Opening the coin door exposes all the coin handling equipment—the coin acceptors and rejector linkages, the coin counter and the coin box. The rear door is used to service the T.V. monitor, the pedal assembly and the components mounted to the cash deck—the PCB, the transformers and the fuses.

An interlock switch is mounted to the cash deck and turns off the entire machine when the rear door is opened. *The interlock switch protects the operator from accidental shock, so it must always be kept in perfect working order.* If you need to test or adjust the machine with the rear door open, place the interlock switch in the closed or "on" position by pulling out the white actuator shaft.

All the major sub-assemblies have been designed modularly for easy servicing or replacement. The control panel, the pedal assembly, the Gran Trak 10 computer and the T.V. monitor can each be removed after the wiring and release bolts have been removed.

C: NEW MACHINE SET-UP AND CHECK OUT PROCEDURES

Before turning this machine on, inspect it carefully for any damage which may have occurred during shipping.

As each new Gran Trak 10 leaves the factory, every component and sub-assembly is carefully checked for proper operation and adjustment. However, since parts may have been damaged or adjustments changed during shipping, the following check out procedure must be repeated prior to placing the machine on location.

1. With the machine unplugged, open both access doors and carefully inspect both the exterior and interior of the machine for any obvious shipping damage to the cabinet or internal components and sub-assemblies. If any such damage is discovered, contact the carrier immediately. Then contact the distributor from whom the game was originally purchased for repair or replacement instructions.

2. Inspect the interior of the machine more carefully looking for broken or disconnected wires, sub-assemblies pulling loose or not firmly mounted and any foreign objects shorting electrical connections. Pay particular attention to the connections to the T.V. monitor, the control panel and the coin door. Also make sure that the PCB edge connector and the fuse are firmly seated. Note: The plug is located inside the cabinet for shipping purposes, and should be fed through the 1½" hole located at the left lower bottom portion of the cabinet.

3. Plug in the machine and if the rear door panel is off,

both yoke rings *simultaneously* for optimum centering of the race course on the CRT.

h. **The A.C. Voltage Switch:** Set this switch to the 115 Volt position ("115" visible on the switch) if the machine is connected to a 115 Volt source. *The T.V. monitor will not function if this switch is misadjusted.*

i. **The T.V. Monitor Fuses:** Two 8/10 Amp, 125 Volt Slo-Blo fuses (313 3AG) protect the T.V. monitor from electrical overload. Replace blown fuses *only* with those which have the above rating. NOTE: The T.V. is not fused by the fuse on the electronics tray.

G: THE COIN DOOR: SERVICE PROCEDURES

All coin handling equipment is accessible through the front door. To collect the coins, open the door, remove the coin box and record the meter reading.

The Gran Trak 10 is equipped with two coin acceptor assemblies so the entire machine will not be out of service if one acceptor is malfunctioning.

Please keep in mind that proper adjustment and lubrication of the coin handling equipment will help minimize your service calls.

1. **THE DOOR LOCK:** The lock cylinder can be withdrawn and replaced after the rear retaining nut and the lock cam are removed. If the coin door does not fit tightly or the lock does not turn freely, try bending the lock cam slightly with a pair of pliers. NOTE: The lock cylinder should be lubricated once every three months or so with graphite or WD-40.

2. **THE REJECT LINKAGE:** A separate handle operates the wiper lever of each coin acceptor. When this handle is pressed down, the wiper lever [#17, Fig. 6d] of the coin acceptor is operated which should dislodge any coins "stuck" in the acceptor. The rejector handles cannot be removed. NOTE: Lubricate the rejector linkage with silicone grease when you receive the machine and thereafter at approximately six month intervals.

3. **THE COIN MICRO SWITCHES:** To remove a malfunctioning micro switch, unscrew the two retaining screws [#1, Fig. 6a], record the wire positions and pull off the slip-on connectors.

4. **THE COIN ACCEPTORS:** The coin acceptor can be removed for servicing after the retaining screw [#2, Fig. 6b] has been removed.

5. **ACCEPTOR ADJUSTMENT AND MAINTENANCE:**

ADJUSTMENT: All coin acceptors leave the factory adjusted for maximum performance. However, if more critical adjustments are necessary or if the unit has been completely disassembled for service, the following adjustment procedure is suggested:

(These tests and adjustments are performed with the acceptor in a vertical position on a level surface [the rest position].)

KICKER AND SEPARATOR

1. Set the unit with the back of the acceptor facing you in the test position.
2. Loosen the screws holding the kicker [1] and the separator [3] and move both the kicker [2] and the separator [4] as far to the right as they will go. Tighten the screws.
3. Insert several test coins (both old and new) and note that some are returned by striking the separator.
4. Loosen the separator screw and move the separator a slight amount to the left. Tighten the screw.
5. Insert the test coins again and, if some of them are still returned, repeat Step #4 until all the coins are accepted.
6. Loosen the kicker screw and move the kicker as far to the left as it will go. Tighten the screw.
7. Insert the test coins and note that some are returned.
8. Loosen the kicker screw and move the kicker a slight amount to the right.
9. Insert the test coins again and, if some are still returned, repeat Step #8 until all the coins are accepted.
10. Be sure that both screws are tight after the adjustments have been made.

THE MAGNET GATE

1. Set the acceptor with the front of the unit facing you in the test position.
2. Turn the magnet gate adjusting screw [#12, Fig. 6d and #3, Fig. 6a] out (counterclockwise) until none of the coins will fit through.
3. With a coin resting in the coin entrance of the acceptor [#4, Fig. 6c], turn the adjuster in (clockwise) until the coin barely passes through the magnet gate.
4. Test this adjustment using several other coins (both old and new) and, if any of them fail to pass through the magnet gate, repeat Step #3 until all of the coins are accepted.
5. Fix the magnet gate adjusting screw in this position by tightening down the magnet gate screw lock nut.

ACCEPTOR MAINTENANCE: Depending on the environment in which the acceptor is used, periodic preventitive maintenance should be performed.

The mainplate [#5, Fig. 6d] may be cleaned with any non-abrasive household cleaner. Rinse and dry thoroughly to remove deposits and film.

Remove all metal particles from the magnet by guiding the point of a screwdriver along the edges of the magnet.

Remove the transfer cradle [#9, Fig. 6d] and clean the bushing and pivot pin. A pipe cleaner is an effective cleaning tool. Apply powdered graphite or pencil lead to the pin and bushing and reassemble.

Spray the entire unit lightly with WD-40 or a similar silicone lubricant.

H: ELECTRONICS TRAY SUB-ASSEMBLIES: SERVICE PROCEDURES

(PULL OUT THE POWER CORD WHILE PERFORMING PROCEDURES 1-4.)

1. **FUSE REPLACEMENT:** First remove the AC protective cover and replace the bad fuse with a Slo-Blo fuse rated at 1 Amp, 125 Volts (313 3AG).

2. **TRANSFORMER REPLACEMENT:** To remove a malfunctioning transformer remove the AC protective cover, record all wire colors and their positions, unsolder the wiring and unscrew the retaining screws. NOTE: When installing the new transformer, be sure to reconnect the chassis ground wire (lugs fastened with wood screws that mount the transformers to the wood electronics tray).

3. **INTERLOCK SWITCH:** To remove the switch, pull off the push-on connectors, squeeze in side tabs on the switch and push it through the mounting bracket.

4. **PRINTED CIRCUIT BOARD:** To remove the PCB, disconnect the PCB edge connector, remove the four retaining screws and carefully lift out the board. PCBs are extremely fragile and require very careful handling.

5. **PCB ADJUSTMENTS:**

a. **Volume:** This adjustment is made by a small blue trim pot marked "volume" near PCB position L8. Adjust the volume to the preference of the location but keep in mind that the machine will sound louder with the door off.

b. **Play Time:** This adjustment is located near A8 and it adjusts both the total play time and the crash time period. Playtime is pre-set before shipment and *should not be adjusted* due to interrelationships with other game functions (i.e., crash time, rating system).

If you have the following symptoms, recalibration of one or more of the cemented pots is indicated and you must return the board to your distributor:

1. If the car seems to move too slowly
2. If the sound of the engine revving up is distorted
3. If the sound of the car coming to a stop with the brakes applied (the "screech" sound) is distorted.

I: THE CONTROL PANEL: SERVICE PROCEDURES

1. **CONTROL PANEL:** To service the rear of the control panel, remove the four wing nuts and the panel will swivel out and be held by the chain. To remove the control panel completely, disconnect wiring and chain and lift out panel assembly. Note wire color and position for reconnection.

2. **GEAR SHIFTER ASSEMBLY:** To remove gear shifter from the control panel, first swivel out the control panel as per procedure #1. Then record the wire colors and their positions or later reference and pull off all the slip-on connectors to the shift switches. Shift assembly can be withdrawn through the front of the control panel after the four retaining screws have been removed.

To open the gear shifter assembly, remove the four machine screws [Fig. 7] while holding the housing halves together with your fingers. Split the housing halves carefully so internal parts will not spring out and become lost. With the housing halves separated, the gearshift rod [#3, Fig. 7], spring [#7, Fig. 7], ball [#15, Fig. 9], detent [#4, Fig. 7] and switch actuators [#5, Fig. 7] will all be accessible. NOTE: When re-assembling the unit, lubricate the ball with a small amount of silicone grease and be sure that you replace the housing screws the same way they came out.

3. **THE PEDAL ASSEMBLY:** The pedal assembly must be removed to replace the brake and accelerator switches. Reach in the rear door and remove three wing nuts [#35, Fig. 2]. From the front of the machine, grasp the protruding lip of the pedal assembly and pull out the entire unit.

To replace switches [# 9; Fig. 8] or pedals [#2, Fig 8], remove the four pedal retaining screws and lift off pedal. Be sure to record all wire colors and

m. **Car Will Not Steer or Turns in One Direction Only:** Check PCB LEDs as per procedure on page 7 and if O.K., then replace the PCB computer. If LED test is O.K., check steering harness and connections and for foreign matter in steering assembly. Replace steering PCB if necessary.

n. **No Brakes:** Check brake switch and wires from brake pedal switch to PCB. If O.K., replace the PCB.

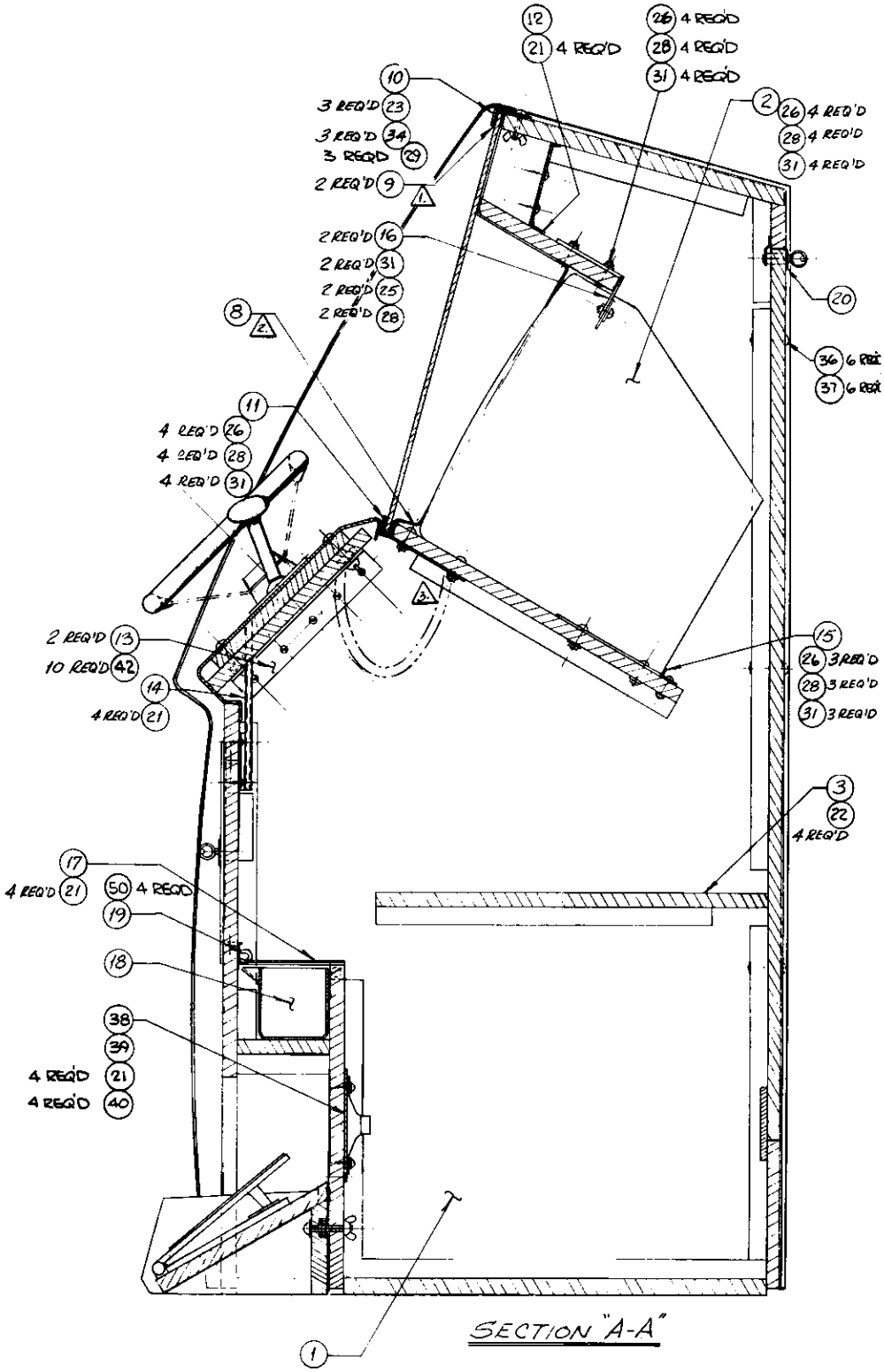
o. **Brakes All The Time:** Check brake switch for foreign material and/or shorting terminals.

p. **No Accelerator:** Follow procedure 14 for "NO BRAKES".

q. **Accelerator All The Time:** Follow procedure #15.

r. **All Four Gears Dead:** Check connections and wires from gearshifter to PCB and if O.K., replace the PCB.

s. **One, Two or Three Gears Dead:** Check the connections and harness of the malfunctioning gear(s): check the shift switch(s) for the malfunctioning gear(s). If problem persists, replace the PCB.



ITEM	PART NUMBER	QTY	DESCRIPTION
49	001060	REF	ENCLOSURE DIA.
50	75304/75-8706	4	SCREW, WOOD, FLAT HD, #7 X 5/8 LG
51	75200/75-7604	8	SCREW, WOOD, RND HD, #6 X 1/2 LG

Figure 1. GT-10; Side View

LIST of MATERIALS

ITEM	PART NUMBER		QTY	DESCRIPTION
1	A000520		1	CABINET ASSEMBLY
2	92016		1	T.V. MONITOR, 23", MOTOROLA XM700
3	A000521		1	ELECTRONICS TRAY ASSEMBLY
4	A001022		1	PEDAL ASSEMBLY
5	A000523		1	PANEL ASSEMBLY
6	A000524		1	CASH DOOR ASSEMBLY
7	000525		1	GLASS, SCREENED
8	000526		1	BEZEL
9	000527		2	CUSHION, GLASS
10	000528		1	ANGLE, GLASS RETAINER, TOP
11	000529		1	CLIP, GLASS RETAINER, BOTTOM
12	A001025		1	ILLUMINATION ASSY
13	000531		2	BRACKET, PANEL MOUNTING
14	A000532		1	SHUTE ASSEMBLY, COIN GUIDE
15	000533		1	ANGLE, T.V. RETAINER
16	000534		2	BRACKET, T.V. RETAINER
17	A000535		1	COVER ASSEMBLY, CASH BOX
18	000536		1	CASH BOX
19	83035	71-301	1	STAPLE, LOCK
20	83030	71-2112	1	LOCK, (4"/KEY & TAB)
21	75313	75-7610	16	SCREW, WOOD, RD HD, #6 x 5/8 LG
22	75318	75-7620	4	SCREW, WOOD, RD HD, #6 x 1 1/4 LG.
23	75171	75-5124	6	BOLT, CARRIAGE, 10-24 x 1 1/2 LG. BLACK OXIDE
24	75809	75-5132	4	BOLT, CARRIAGE, 10-24 x 2 1/4 LG.
25	75173	72-18105	2	SCREW, MACH., PAN HD., 8-32 x 5/8 LG.
26	75174	72-18205	18	SCREW, MACH., PAN HD., 8-32 x 1 1/4 LG.
27	75808	72-15325	3	SCREW, MACH., HEX HD., 1/4-20 FULL TH'D x 2 LG.
28	75130	75-0108	18	WASHER, FLAT, STEEL, #8
29	75107	75-0105	11	WASHER, FLAT, STEEL, #10
30	75131	75-0155	6	WASHER, FLAT, STEEL, #1/4
31	75105	75-9108	17	NUT, HEX, STEEL, 8-32
32	75106	75-9110	8	NUT, HEX, STEEL, 10-24
33	75155	75-9135	3	NUT, HEX, STEEL, 1/4-20
34	75145	75-931	7	WINGNUT, 10-24
35	75220	75-935	3	WINGNUT, 1/4-20
36	75179	72-11328	6	SCREW, MACH., BIUDLUS HD., PHIL, #10-24 x 2" LG
37	75408	75-0103	6	WASHER, REGULAR PATTERN #10
38	000898		1	GRILL, SPEAKER
39	48-001		1	SPEAKER
40	75129	75-0165	4	WASHER, FLAT, REG. PATTERN #6
41	75196	75-5114	1	BOLT, CARRIAGE, #10-24 x 3/8 LG. BLACK OXIDE
42	75312	75-7810	11	SCREW, WOOD, RD. HD. #8 x 5/8 LG
⚠ 43	83258	83-258	1	DECAL TIME
⚠ 44	83259	83-259	1	DECAL MILES
⚠ 45	83260	83-260	5	ARROWS
⚠ 46	001009		REF	CAT DECAL LOCATIONS
47	001002		1	CARD, PRINTED
48	000873		REF	SCHEMATIC DIA.

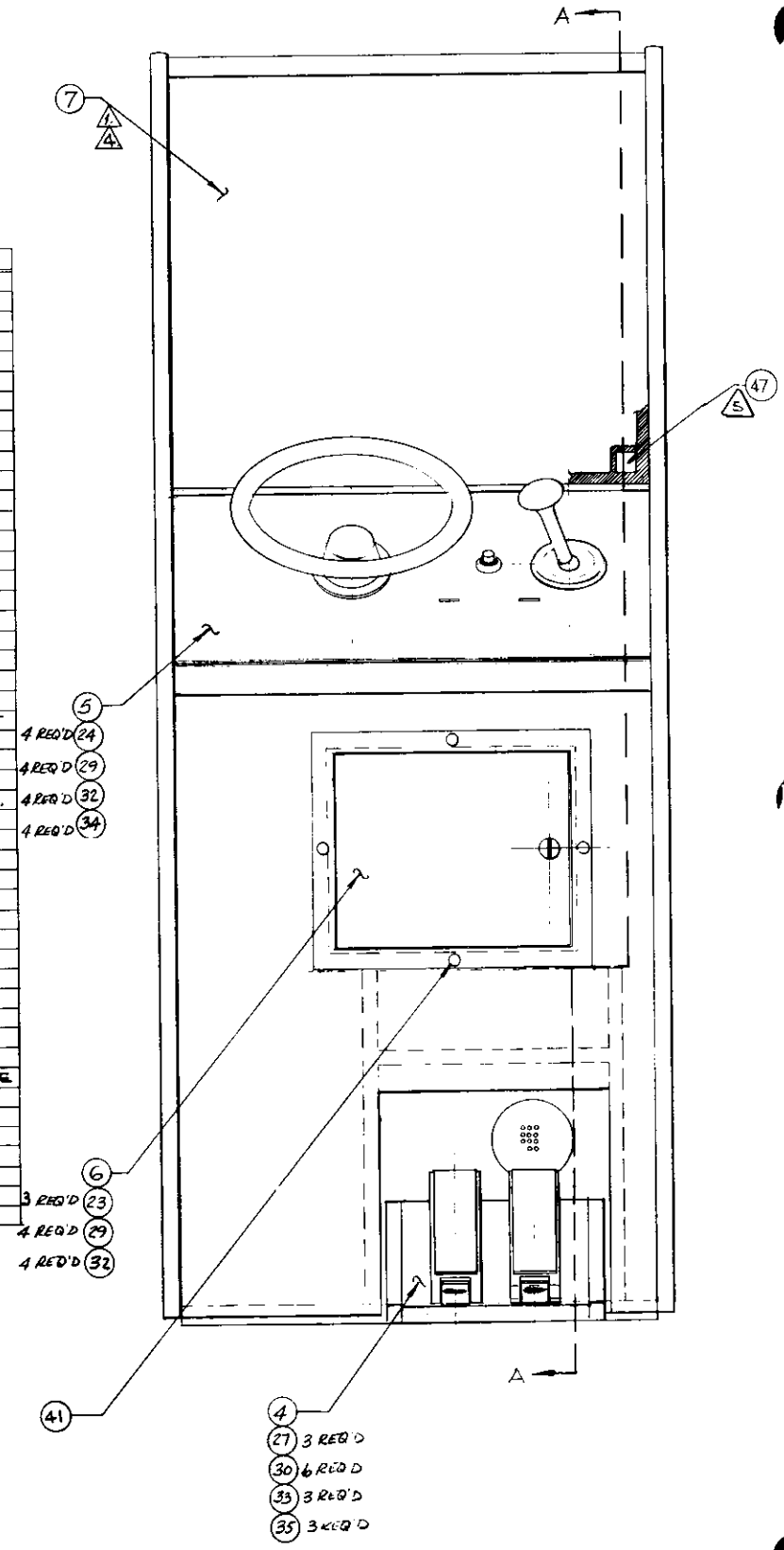


Figure 2. GT-10; Front View

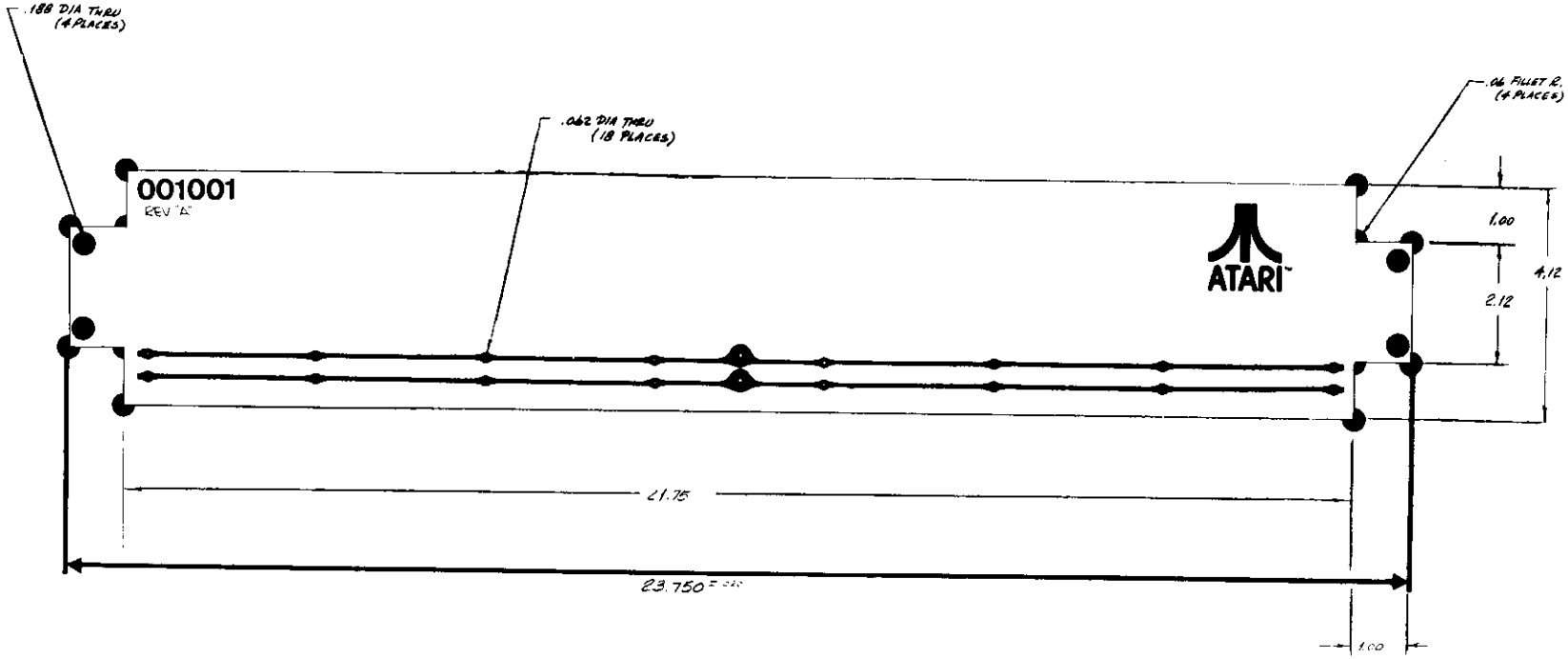
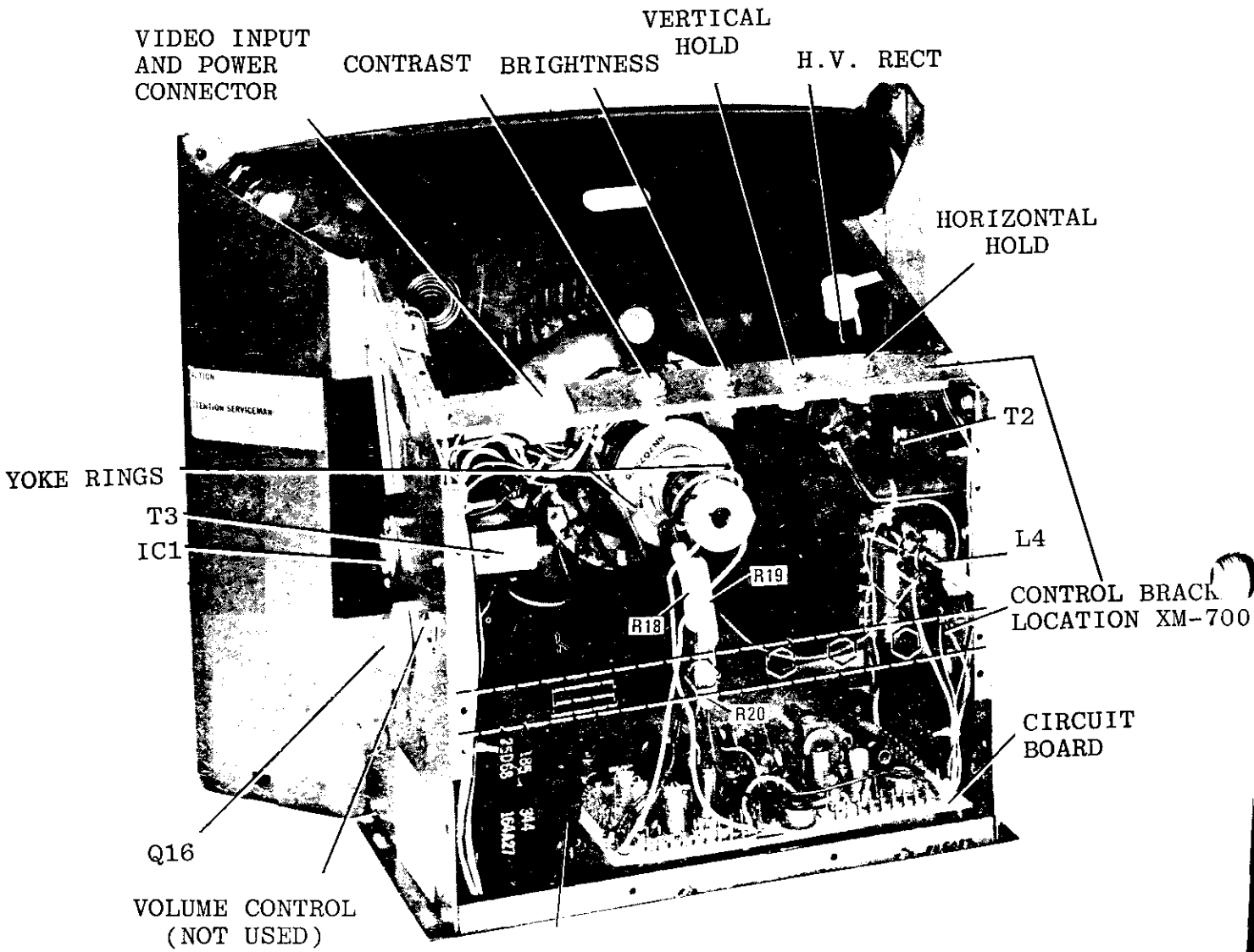
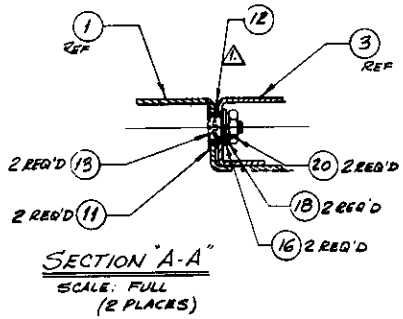


Figure 3. General Illumination Lamps



XM-700 CHASSIS REAR VIEW

Figure 4. T.V. Monitor Adjustments



SECTION "A-A"
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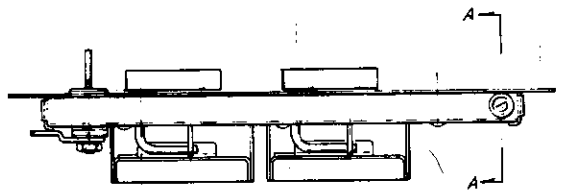
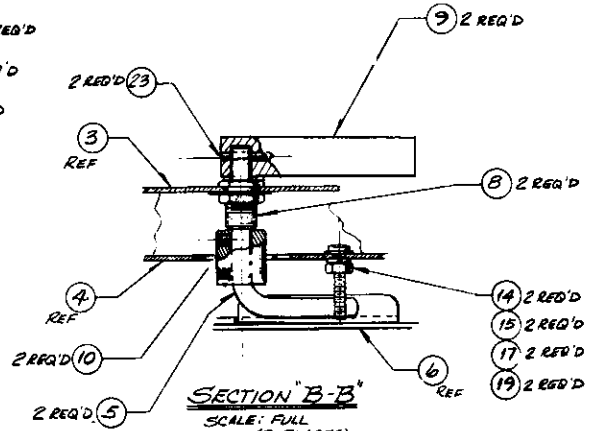
(2 PLACES)





SECTION "B-B"
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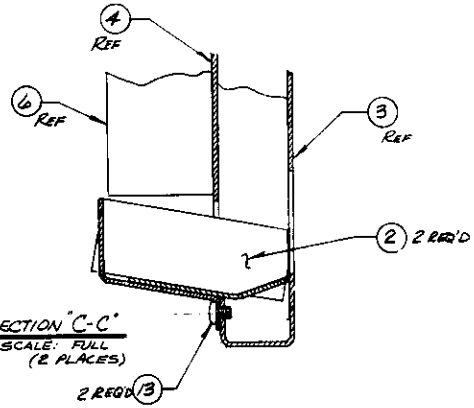

SECTION "C-C"
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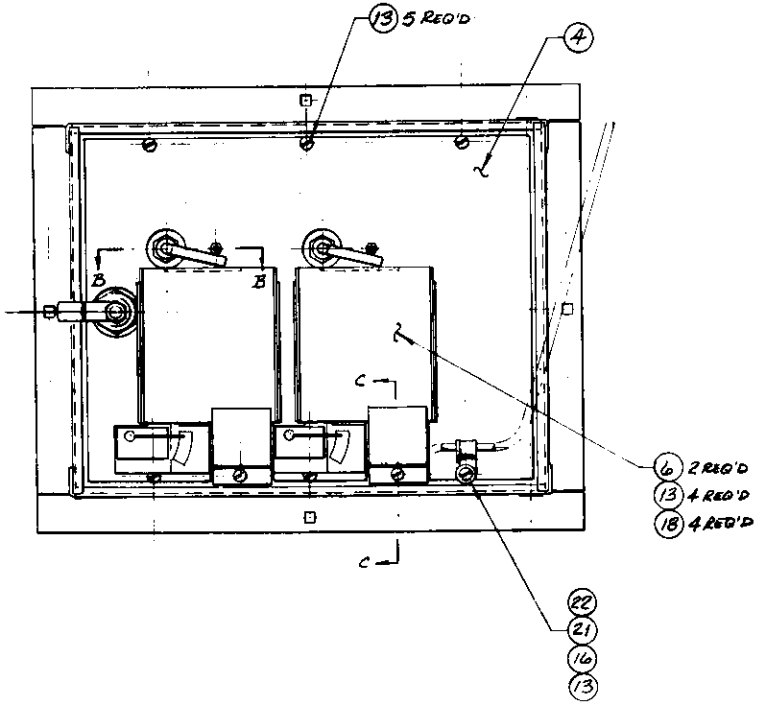
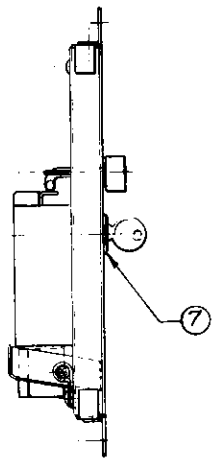
(2 PLACES)





LIST of MATERIALS **Figure 5. Coin Door**

ITEM	PART NUMBER	QTY	DESCRIPTION
1	000570	1	FRAME, WELDMENT
2	000573	2	CUP, REJECT, WELDMENT
3	000576	1	DOOR
4	000577	1	PANEL
5	000578	2	LEVER, REJECT
6	71-1125CU/000909	2	ACCEPTOR MECHANISM ASSY, 25¢ U.S.
7	830307I-2121	1	LOCK ("H"/KEY & NUT)
8	000624 76-07204	2	BUSHING, PANEL MOUNTED
9	001020	2	KNOB, REJECT LEVER
10	000626 73-60412	2	COLLER ("H"/SET SCREW)
11	000569 75-0814	2	WASHER, CENTERING
12	75449 75-0215	1	WASHER, FLAT, REGULAR PATTERN, STEEL, #3/8
13	75147 72-16059	14	SCREW, MACH., PAN HD, 6-32 x 3/16 LG
14	75195/72-18149	2	SCREW, MACH, PAN HD, 8-32 x 7/8 LG.
15	75150 75-0183	2	WASHER, FLAT, REG. PATTERN, #8
16	75129 75-0163	4	WASHER, FLAT, REGULAR PATTERN #6
17	75111 75-048	2	WASHER, SPLIT LOCK, #8
18	75110 75-046	8	WASHER, SPLIT LOCK, #6
19	75105/75-9185	2	NUT, HEX, STEEL, 8-32
20	75108 75-9145	4	NUT, HEX, STEEL, 6-32
21	83661 78-222N	1	CLAMP, CABLE
22	000579	1	CABLE ASSEMBLY
23	75-20610/83261	2	PIN, SPRING, 9/32 DIA x 5/8 LG.

Figure 6b

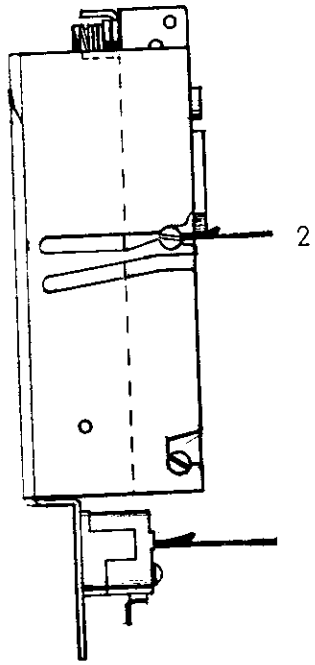


Figure 6a

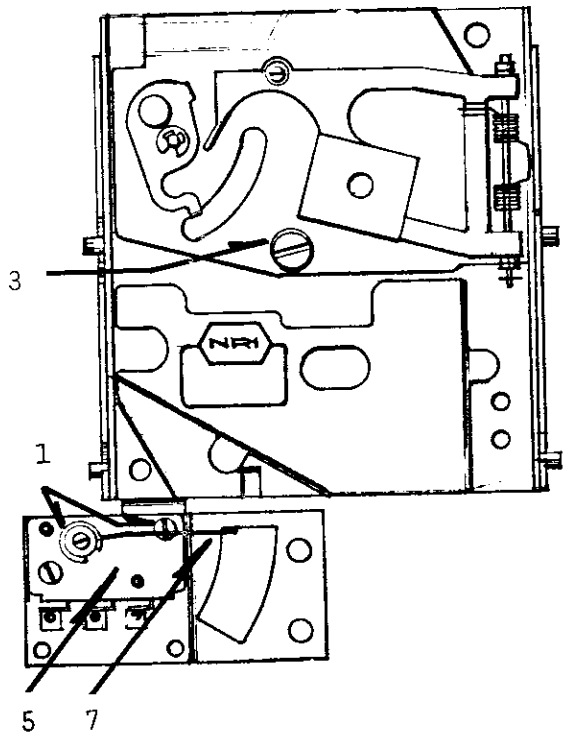
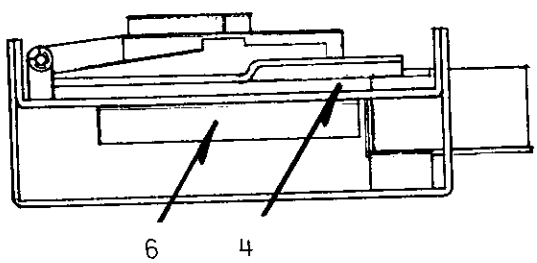
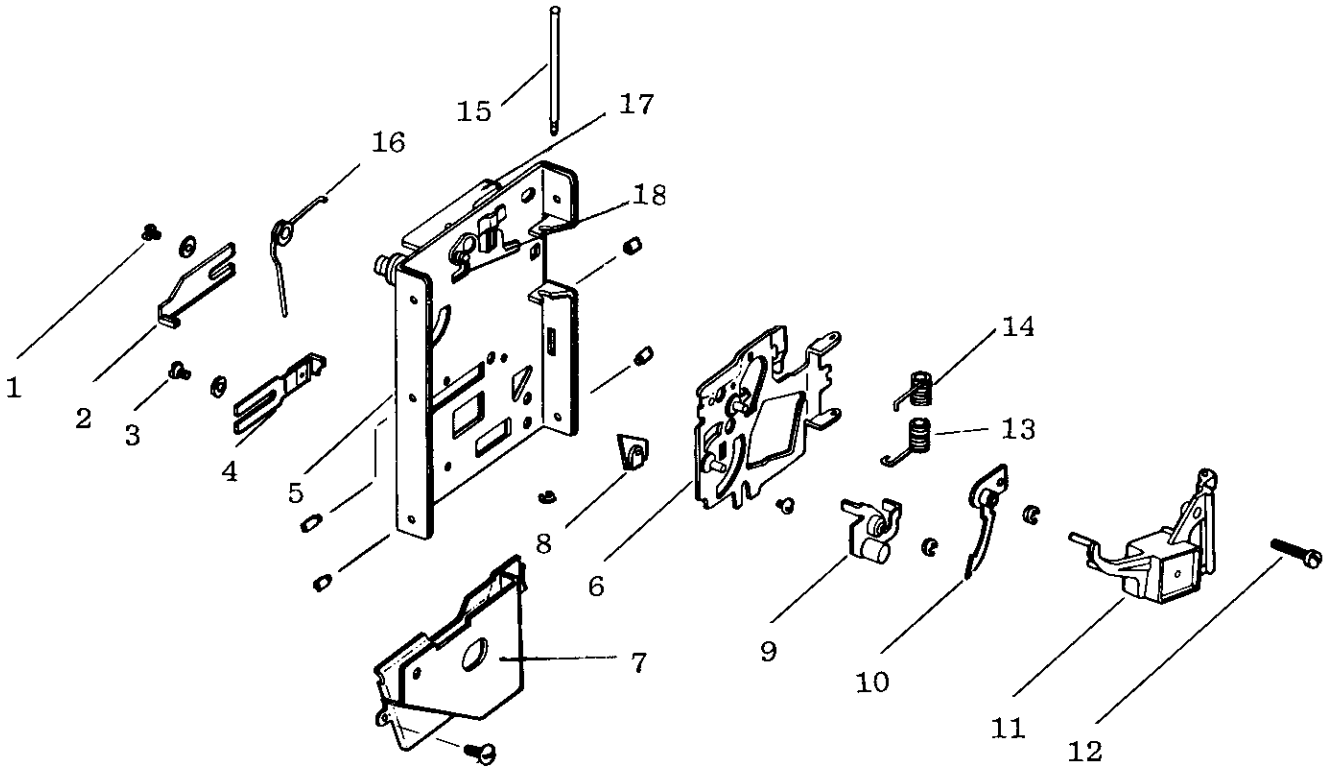


Figure 6c



1. COIN SWITCH RETAINING SCREWS
2. COIN ACCEPTOR RETAINING SCREW
3. MAGNET GATE ADJUSTER
4. COIN ENTRANCE
5. COIN SWITCH
6. WIPER LEVER
7. TRIP WIRE

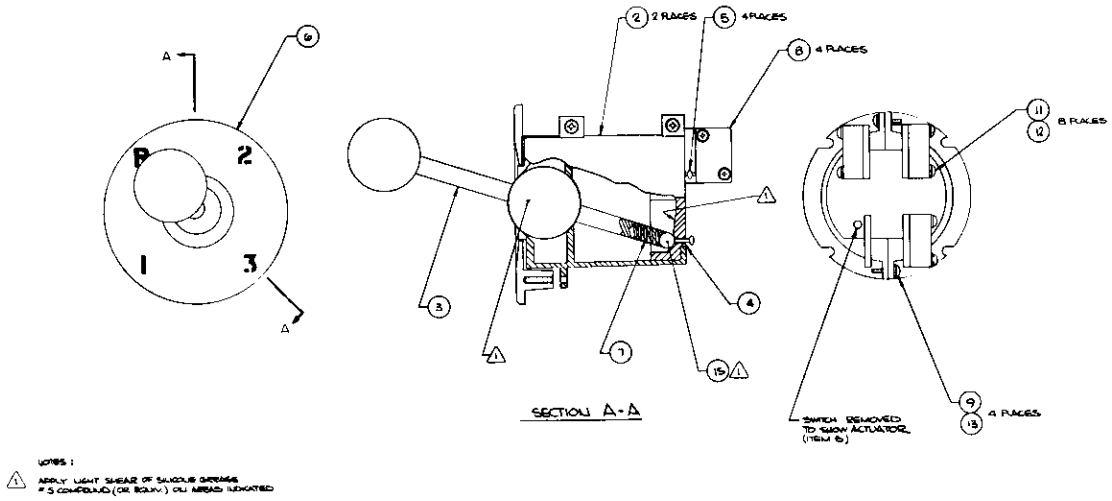
Figure 6. Coin Acceptor



ITEM	DESCRIPTION
1.	KICKER SCREW
2.	KICKER
3.	SEPARATOR SCREW
4.	SEPARATOR
5.	MAINPLATE ASSEMBLY
6.	GATE ASSEMBLY
7.	COVERPLATE ASSEMBLY
8.	RAIL
9.	CRADLE ASSEMBLY
10.	UNDERSIZE LEVER
11.	MAGNET ASSEMBLY
12.	MAGNET GATE ADJUSTER
13.	LOWER GATE PIVOT SPRING
14.	UPPER GATE PIVOT SPRING
15.	GATE PIVOT PIN
16.	WIPER LEVER SPRING
17.	WIPER LEVER
18.	WIPER

Figure 6d

COIN ACCEPTOR
(EXPLODED VIEW)

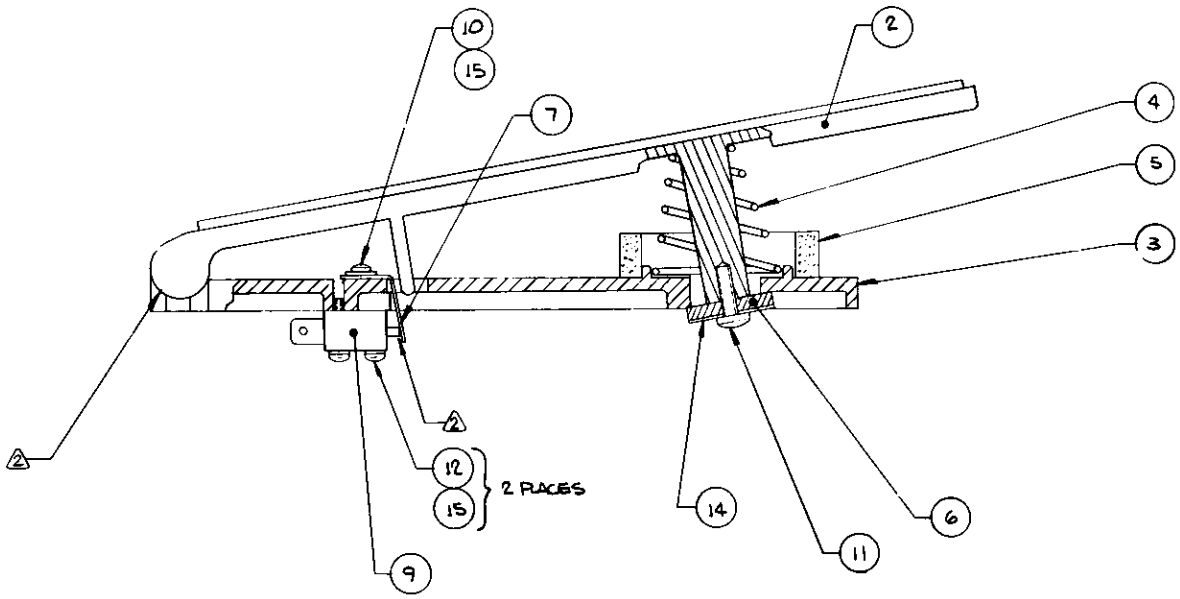


NOTES :

1. APPLY LIGHT SHEAR OF SILICONE GREASE # 5 COMPOUND (OR EQUIV.) OU AREAS INDICATED

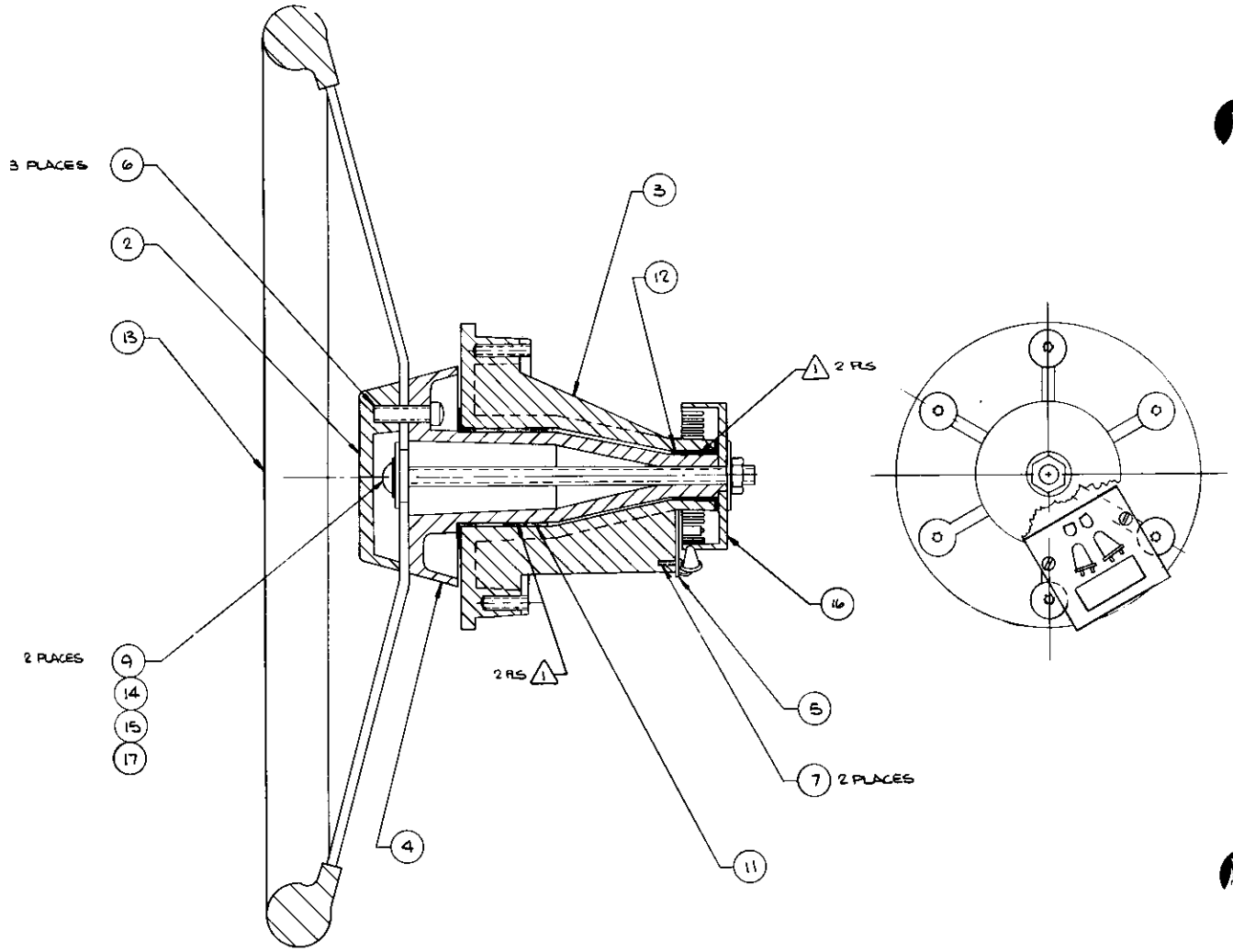
ITEM	PART NUMBER	DESCRIPTION
1.	000608	Shift Assembly
2.	000609	Shift Housing
3.	A000610	Handle Assembly
4.	000611	Shift Detent
5.	000628	Shift Rivet
6.	000612	Shift Bezel
7.	83241	Spring
8.	60004	Cherry Switch
9.	75129	Washer, Flat, #6
10.		
11.	75163	Washer, Flat, #4
12.	75800	Screw, #4-40 x 3/4
13.	75801	Screw, #6-32 x 1/2
14.		
15.	75407	Ball, Steel, 3/8

Figure 7. Gear Shifter



ITEM	PART NUMBER	DESCRIPTION
1.	A000589	Foot Pedal Assembly
2.	000590	Foot Pedal
3.	000591	Pedal Foot
4.	000592	Spring
5.	000593	Bumper
6.	000594	Stop Washer
7.	000596	Actuator
8.	000597	Bearing Block
9.	60004	Cherry Switch
10.	75166	Screw, #4-40 x 1/4
11.	75199	Screw, #4-20 x 1/2
12.	75800	Screw, #4-40 x 3/4
13.		
14.	75425	Washer, Fender 1/4
15.	75163	Washer, Flat, #4

Figure 8. Pedal Assembly



NOTES:

1. APPLY LIGHT FILM OF SILICONE GREASE #5 COMPOUND (OR EQUIV.) ON AREAS INDICATED. (ITEM 18)

2. VENDOR PART NO. 3201-3803

Figure 9. Steering Wheel Assembly

ITEM	PART NUMBER	DESCRIPTION
1.	000598	Steering Wheel Assembly
2.	000599	Cover
3.	000605	Housing
4.	000606	Shaft
5.	000607	PCB Assembly
6.	75804	Screw, #¼-20 x 3/4
7.	75424	Screw, #2 x 1/4
8.		
9.	75409	Washer, Fender, 1/4
10.		
11.	83236	Bearing
12.	83242	Bearing
13.	83243	Steering Wheel
14.	75221	Nut, #¼-20, Nylon Lock
15.	75198	Screw, #¼-20 x 5
16.	000616	Light Hub
17.	75189	Washer, 1/4, Starlock
18.	83268	Silicone Grease, #5

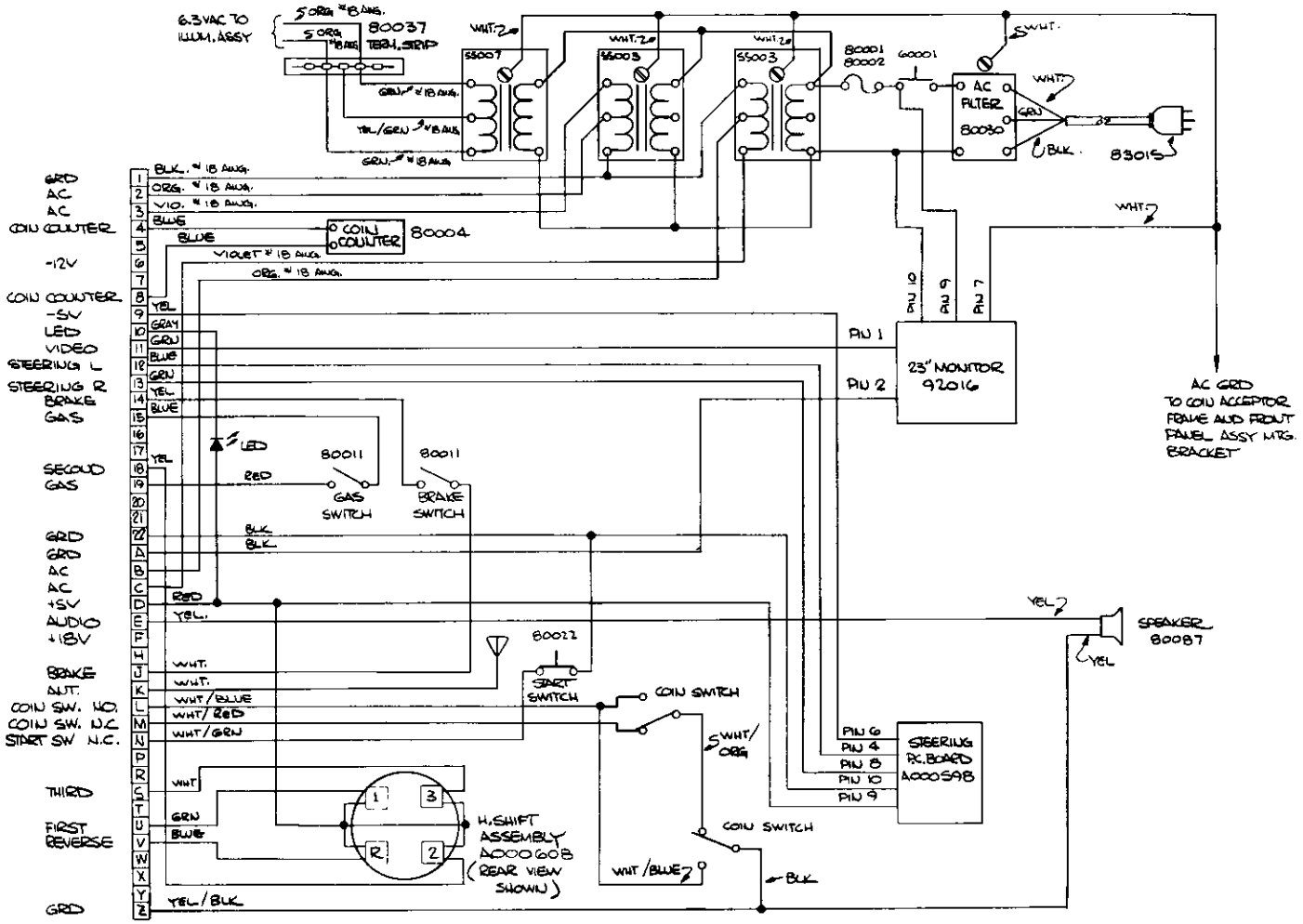
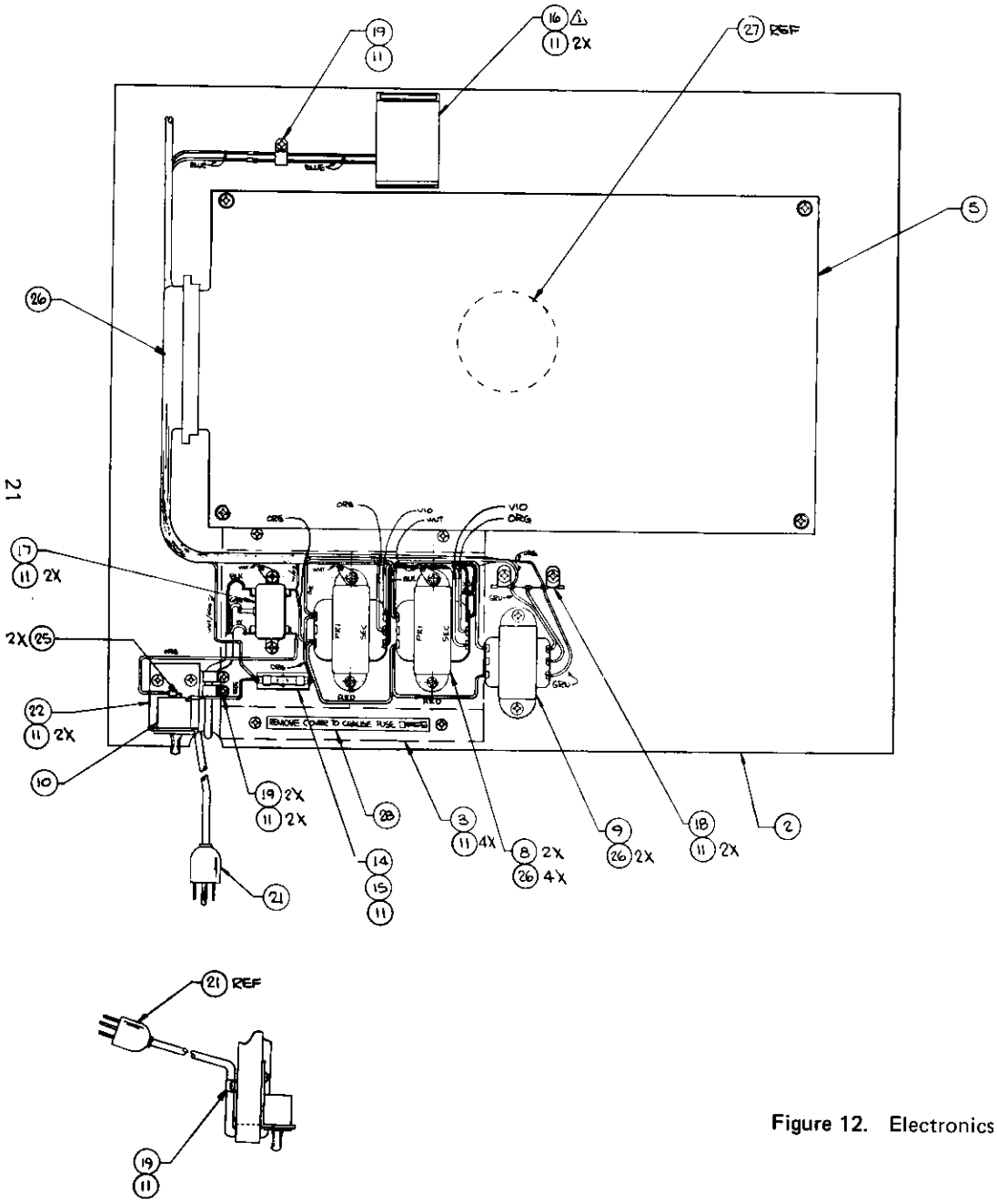


Figure 10. Wiring Diagram

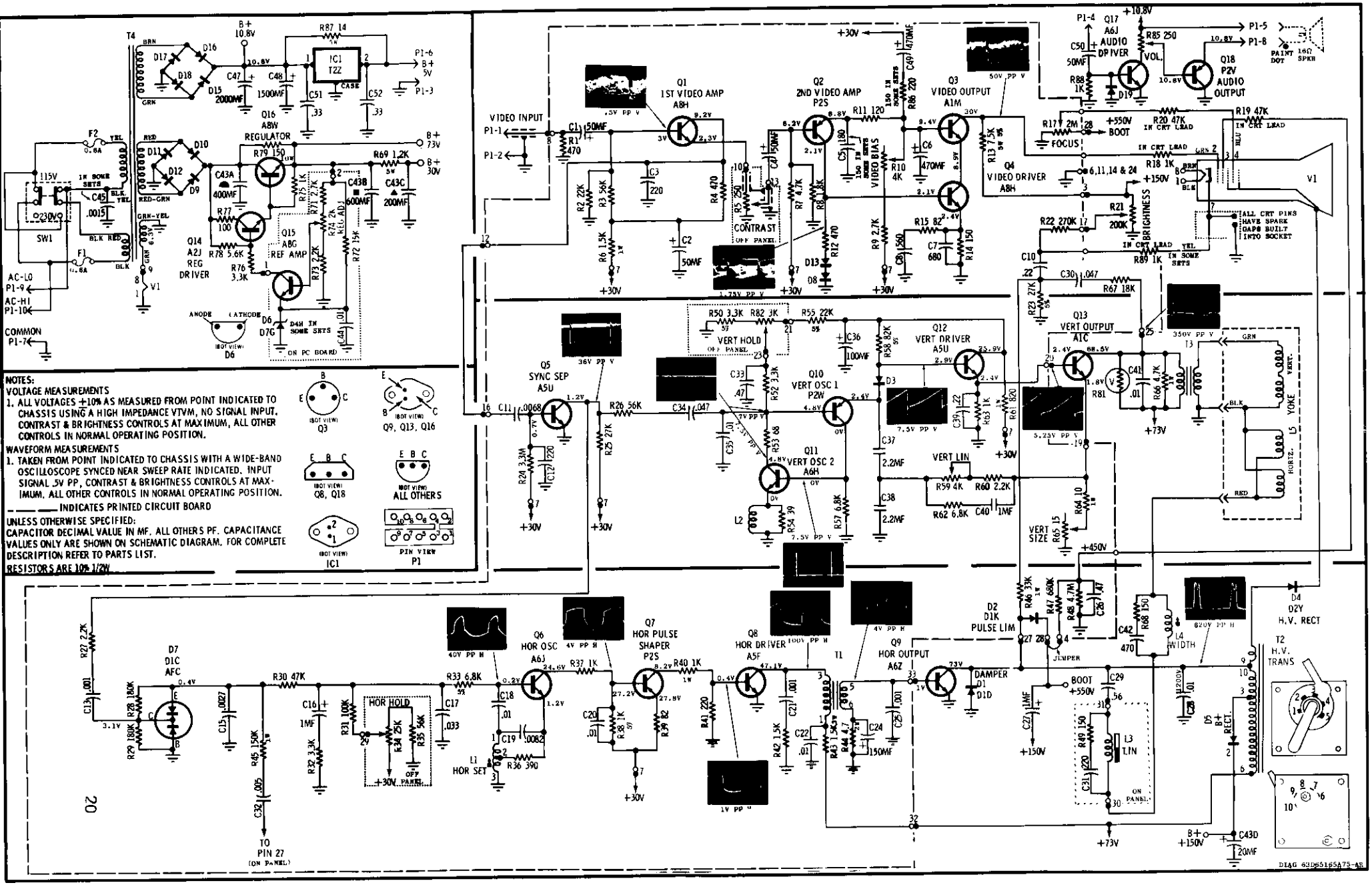


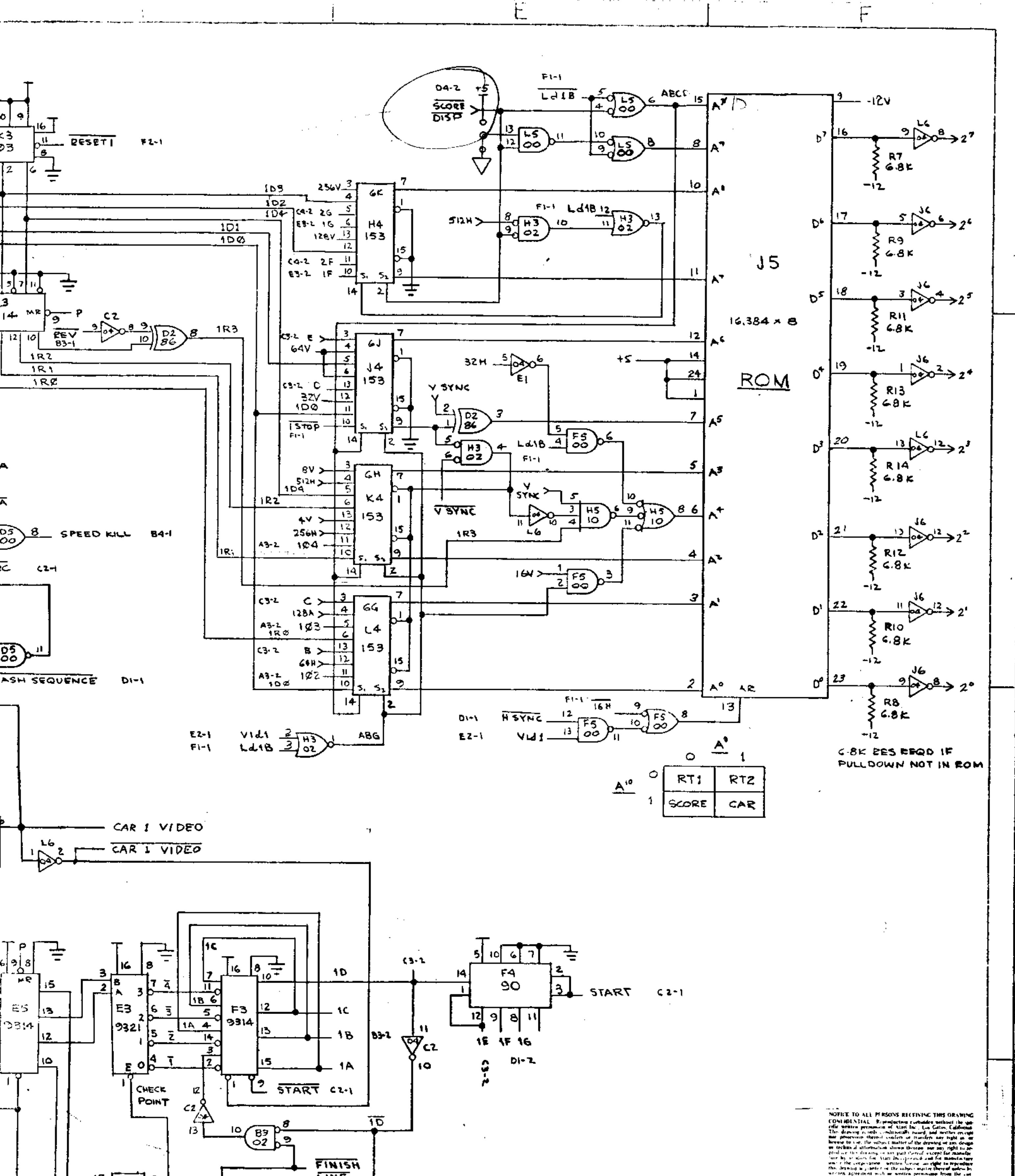
ITEM	PART NUMBER	DESCRIPTION
1.	A000521	Electronics Tray Assembly
2.	000548	Tray, Electronics
3.	000622	Cover, Transformer
4.		
5.	A000872E	PCB Computer, Rev. E
6.		
7.		
8.	55003*	Transformer
9.	55007*	Transformer
10.	60001	Interlock Switch
11.	75200	Screw, #6 x 1/2
12.	75211	Screw, #6 x 1-1/4
13.	75102	Washer, Flat, #6
14.	80001	Fuse Holder
15.	80002	Fuse, 1 Amp., Slo-Blo
16.	80004	Game Counter
17.	80030	AC Filter
18.	80037	Terminal Strip
19.	83011	Cable Clamp
20	83013	Spacer, 1/2, #6
21.	83015	Power Cord, 8'
22.	83097	Switch Bracket
23.	77035	Wire, 18 gauge, Orange
24.	77037	Wire, 18 gauge, Red
25.	80054	Terminal, Push-on, 3/16
26.	75-7812	Screw, #8 x 3/4
27.	001141	Form, Disc
28.	000871	Label

* Optional transformer replaces items 8 and 9.

Figure 12. Electronics Tray Assembly

Figure 11. T.V. Monitor Schematic Diagram





INTERPRET THIS DRAWING PER USASI Y14.5

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON

DRAWN BY: PCD 3/8/74

CHECKED

DESIGN ENGINEER

PRODUCT ENGINEER

DOCUMENT CONTROL

APPROVED

ATARI INCORPORATED
14600 Winchester Boulevard
Los Gatos, California 95030

TITLE: RACE TRAK SCHEMATIC

SIZE: D DRAWING NO.: 000873 REV: K

SHEET 2 OF 2

A

F	REL FOR PROD	4-3-74		
G	REVISED			
H	REVISED MF	5-28-74		
J	REV PER ECN 516	6-21-74		
K	REV PER ECN 747			

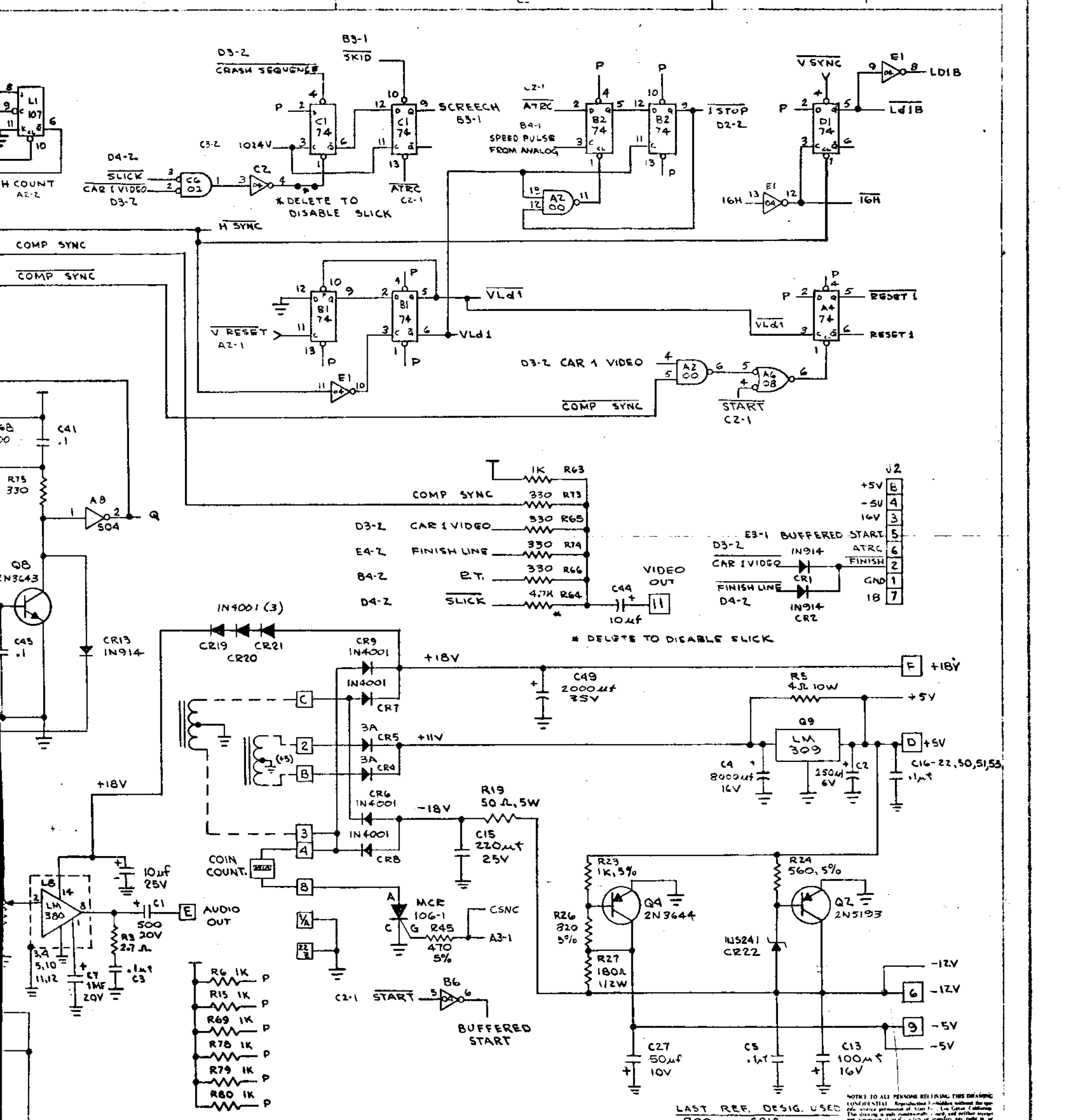
TO STEERING PCB

+5V
-5V
CR18
CR17
R21 150
R20 150
RATE
J8 7413
K8 7474
CW
12.6V
CRASH A
D2-2
A2 00
A3 02
A4 74
J3 193
RESET 1
F2-1
ATRC
C2-1
E1-1 SCREECH FROM ANALOG

ROM DATA
H7 9314
VLd1
E1-1
J7 9316
K7 9316
L7 9316
V STOP
H COUNT
RESET 1
TO ROM ADDRESS
L5 00

START
PLAY TIME
1MEG R72
R71 220K
1 SEC
B8 555
R70 6.8K
C43 4.7mf
C42 .1
1K R87
A5 74
B5 74
C5 74
512V
1024V
D1-1
RT
D5 00
ROM DATA
HG 165
FG 165
H SYNC
Ld1B
F1-1
VLd1
E2-1
E7 9316
D7 9316
H5 10
DC 107
A5 79
CLOCK
B1-1
RESET 1
F2-1

ROM DATA
EG 165
4H
E1
Ld1B
F1-1
D3 00
C38 100PF
R54 470
32H
SCORE DELAY
C3 74
B3 02
C6 02
RT CLOCK
RT
A3 02
D2 86
C2
E3-2 1A
E3-2 1B
E3-2 1C
E2 08
D4 9322
512H
1 SEC
C4 192
C54 0.01
B4 192
START
END GAME
ATRC
C2-1
2F 2G
D1-2
J1 10
8V
4V
ROM DATA
SPECIAL DATA



CAR A	SCORE C	TIME D	1 RT E	2 RT F	SPEED CODE G	ROM ADD	MULTIPLEX ADD
1	1	1	0	0	0	A10	
1	0	0	0	1	1	9	
1D3	1G	2G	256V	256V	256V	8	A+C+D+EFG
1D2	1F	2F	128V	128V	128V	7	A+C+D+EFG
1D1	1E	2E	64V	64V	64V	6	A+C+D+EFG
1DØ	1D	2D	32V	32V	0 GO 1 STOP	5	A+C+D+EF+G
32H*	16V	16V	16V	16V	1 R3 0 STOP	4	A+C+D+EF+G
1D4	8V	8V	512H	512H	1R2	3	A+CD+EF+G
1D4	4V	4V	256H	256H	1R1	2	A+CD+EF+G
1D3	1C	2C	128H	128H	1RØ	1	A+C+D+EF+G
1D2	1B	2B	64H	64H	1DØ	Ø	A+C+D+EF+G

* $\overline{32H}$ 1 FIRST PART OF CAR
0 2ND " " "

EXTRA GATES
7404 – L6, L6
7474 – D1, K8
741 – F9

LAST REF. DESIG. USED
R90 CR18
C55
Q8

ATARI INCORPORATED
14600 Winchester Boulevard
Los Gatos, California 95030

RACE TRAK SCHEMATIC

DRAWN BY PCD 3/8/74

D 000873 K

SHEET 1 OF 2

F	REL PER ECO	4-5-74			J	REV PER ECN 5116	6-21-74
G	REVISED				K	REV PER ECN 7417	9/20/74
H	REVISED	8-28-74