

SUPERSTAR BASKETBALL

Maintenance Guide

BOK-210-40403

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INTRODUCTION

This Maintenance Guide is an overview of the Superstar Basketball game and provides setup and basic trouble shooting procedures. For advanced problems it is recommended that the factory be contacted.

It should be noted that the majority of problems occur due to simple causes, which are listed first and should be checked before proceeding to more sophisticated tests. CAUTION is warned when connectors are disconnected and reconnected. Please check that they have been properly connected BEFORE power is applied. A wrong connection can permanently damage the electronics.

GAME OPERATION

1. Unpack and setup game (see separate instructions).
2. Before applying power, set Option Switches as required.
3. Apply power and allow a few seconds for the Displays to initialize.
4. If a game was not in progress (see note) the Coin Slot will open. Coin game for 1 to 4 players. Flashing Displays indicate Players coined. Start Button will flash. Credits will be given for all Coins over 4 Players.
5. After pressing the Start Button, the Coin Slot will close, and the Ball Gate will open, play now begins. At end of play, the Ball Gate will close. Players will switch at the end of each Period and again must press the Start Button. A single player will play straight through. A flashing Display indicates the current player.
6. The first 3 Periods will score 2 points and the last Period will score 3 points per basket. Scoring will commence at the end of the Banner Tune and stop at the Buzzer. Note that this allows a delay to let the balls reach the Player at the beginning and a delay to allow the balls to be cleared after time runs out. When two or more are playing, the next Player does not need to wait for the latter delay and may press the Start Button to suit.
7. If Tickets are enabled, payout will be made at the end of each Player's 4th Period.
8. At end of game the High Score will be displayed. If Free Games are enabled, those Players with a high enough score will be given a single Free Game. Free Games are indicated by a flashing Display.
9. At end of game, Credits will automatically Coin Players. If less than 4 Players are coined the Coin Slot will reopen.

NOTE:

During power outages internal memory will maintain game status for several hours. Upon power up, any game in progress will resume when the Start Button is depressed.

SWITCH OPTIONS and CONTROLS

SW1	SW2	TICKET SCORE
OFF	OFF	10
OFF	ON	20
ON	OFF	OFF
ON	ON	OFF

SW3	SW4	FREE GAME SCORE
OFF	OFF	OFF
OFF	ON	50
ON	OFF	65
ON	ON	80

SW5	SW6	SECONDS PER QUARTER
OFF	OFF	5
OFF	ON	10
ON	OFF	12
ON	ON	15

SW7	SW8	COINS PER PLAY
OFF	OFF	1
OFF	ON	2
ON	OFF	3
ON	ON	4

VOLUME CONTROL

Sound effects volume can be adjusted via a small single turn control on the main board. Adjust carefully with a small blade screw driver.

MANUAL GAME RESET

To reset all memory registers, (High Score, Players Scores, Credits, Etc.) remove power from game. Then, while depressing the Start Button, apply power. Wait for all Displays to clear to zero before releasing the Start Button.

TICKET OPERATION

Tickets must be threaded through pinch rollers with solid part of ticket blocking the sensor. Ticket Switch Option above must be enabled.

BASIC TROUBLE SHOOTING

Turn power off and examine the cables, connectors and circuit boards carefully. Check for broken or disconnected wires. If any circuit boards have been spilled upon, carefully remove them. Clean with a spray flux remover, water can be used if they are dried afterwards.

If a known good board or parts are available substitute to find the bad module.

CHECK THE FOLLOWING IF:

Game does not play as expected.

Check option switch settings.

No Flood Lamps.

Bulbs burned out or no power to game. These are not controlled by the Control Board check the AC line.

No Coin Door Lights or Display.

Check fuse F2 on Control Board. Replace ONLY with 1/2 amp normal blow fuse. If fuse continues to blow, replace board or see Advanced Troubleshooting section.

Gate does not open.

Check fuse F1 on Control Board. Replace ONLY with 1 1/2 amp normal blow fuse. If fuse keeps blowing then Gate is out of adjustment. DO NOT install larger fuse or Solenoid will burn out. If fuse is ok, Coin and Start game checking for 120VAC at Solenoid.

Gate does not close.

Check for obstructions. Check AC to Solenoid, if not off when it should be see Advanced Trouble Shooting section.

No Sound.

Check volume control and speaker.

Tickets do not dispense.

Check option switches. Check that tickets are installed properly. See Ticket Operation section.

No Display, Coin Door Light lit.

Check cable to Displays.

No Ball Scoring.

Check cable to Sensor. Check Sensor mounting on Hoop.

Erratic Game Operation.

Change Microprocessor.

ADVANCED TROUBLE SHOOTING

Refer to the Locator Drawing and Schematics, they have been annotated with component use, test voltages and signals to check for.

Use the minus (-) side of the bridge (BR1) to ground your test equipment for DC measurements. Be careful of the AC section of the board.

Component parts should not be changed unless you are 99% sure their the problem. Then great care should be taken in their removal and replacement. If you do not have advanced desoldering equipment it is recommended that an IC be clipped near it's body and individual pins removed with a low wattage iron by applying heat to the pin and not the pad of the circuit board. After the pins are removed clear the holes of solder. Always desolder from the side that has the most land area connected to the pad and never exert pressure on the pad.

TEST PROCEDURES

- Check the DC voltages. (V+, P5, B+, D+)
- Check for a high Reset (RES*) at U1-1.
- Check for a high Primary Power Fail (PPF*) at U2-4.
- Check for clock (ALE) at U2-11.
- Check related signals to problem.

COMMON FAILURES

Fuse F2 Blows

Generally a short in the power supply section, but, could be a worn out MOV on the AC side of the transformer. Replace this fuse only with 1/2 amp normal blow type.

Display Problems

If all Displays will go to a single zero when the game is manually reset the problem is generally not in the Display boards. If this is not the case the MC14499 IC is usually bad. This IC will not survive the Display board being connected incorrectly. Note that the Displays pass their data serially from one board to another so that once a bad one is encountered all that follow will have erroneous data.

No Sound

Bad P2 or C5.

No Sensor

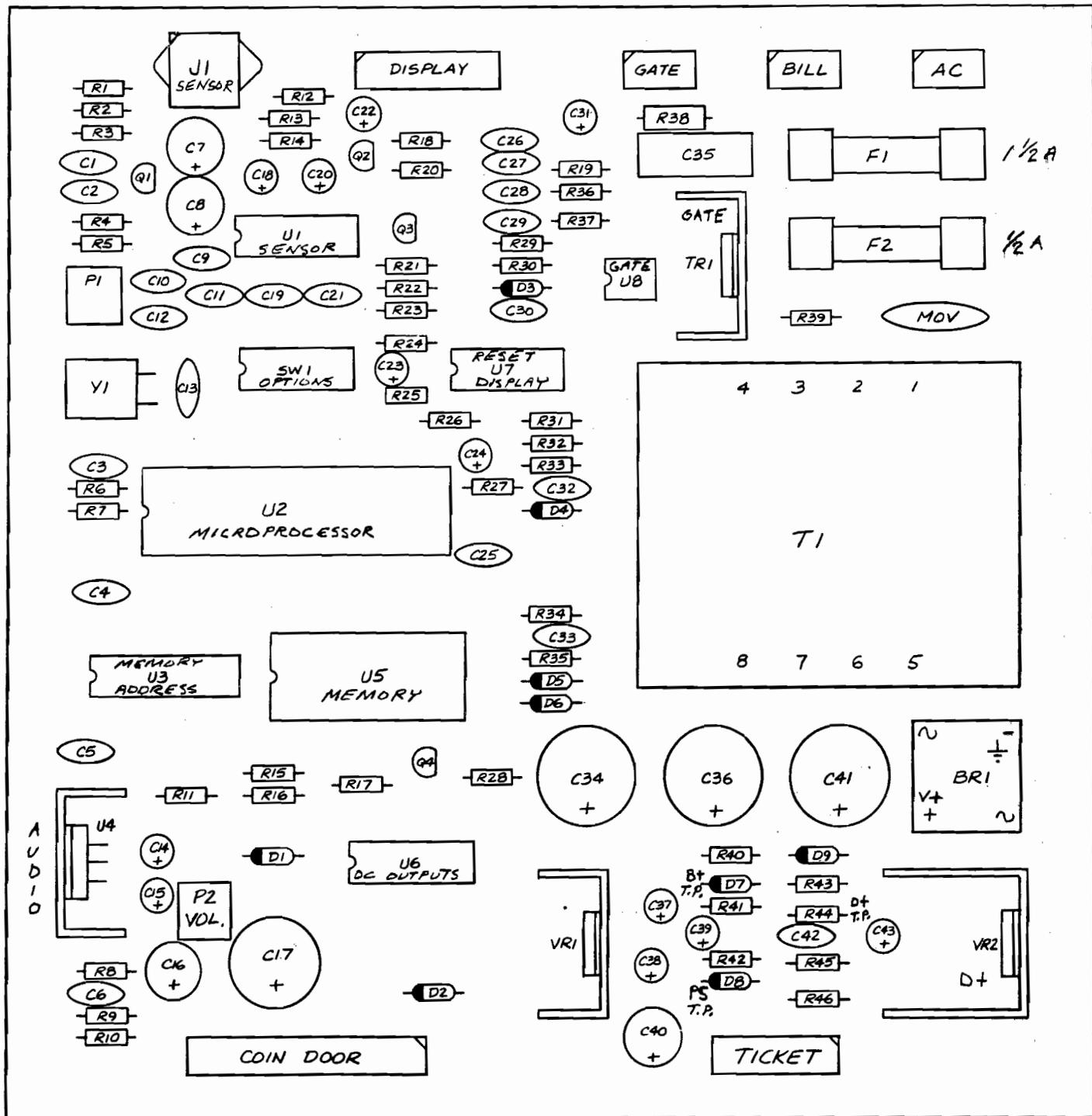
Generally the problems is in the Sensor assembly.

Reject, Gate, Tickets, Start Indicator Failure

Check U6. High on input should be low on output.
If any output was shorted this chip is probably bad.

Triac (TR1) Failure

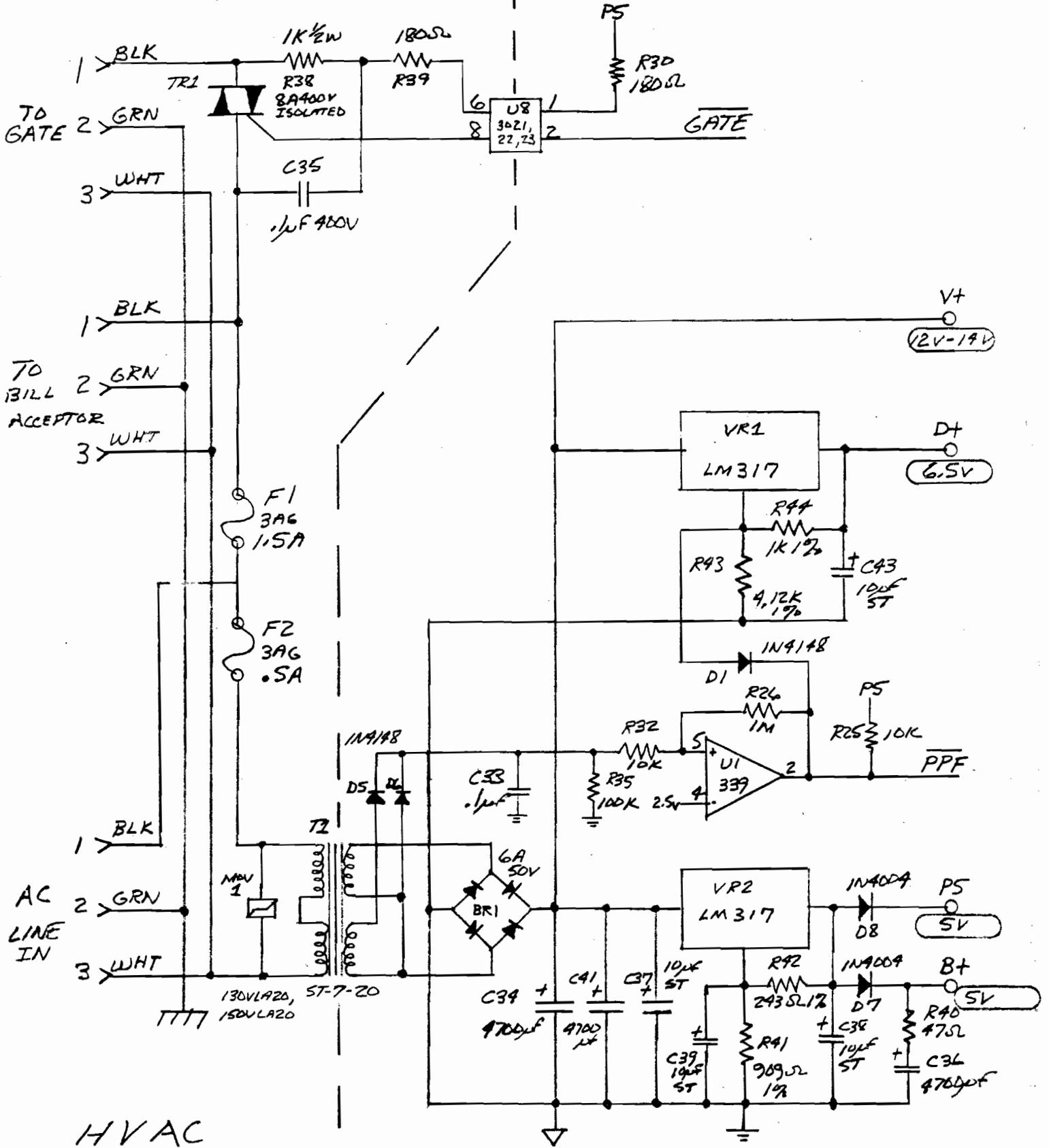
Short on Gate output and/or to large of fuse (F1).



PROPRIETARY INFORMATION

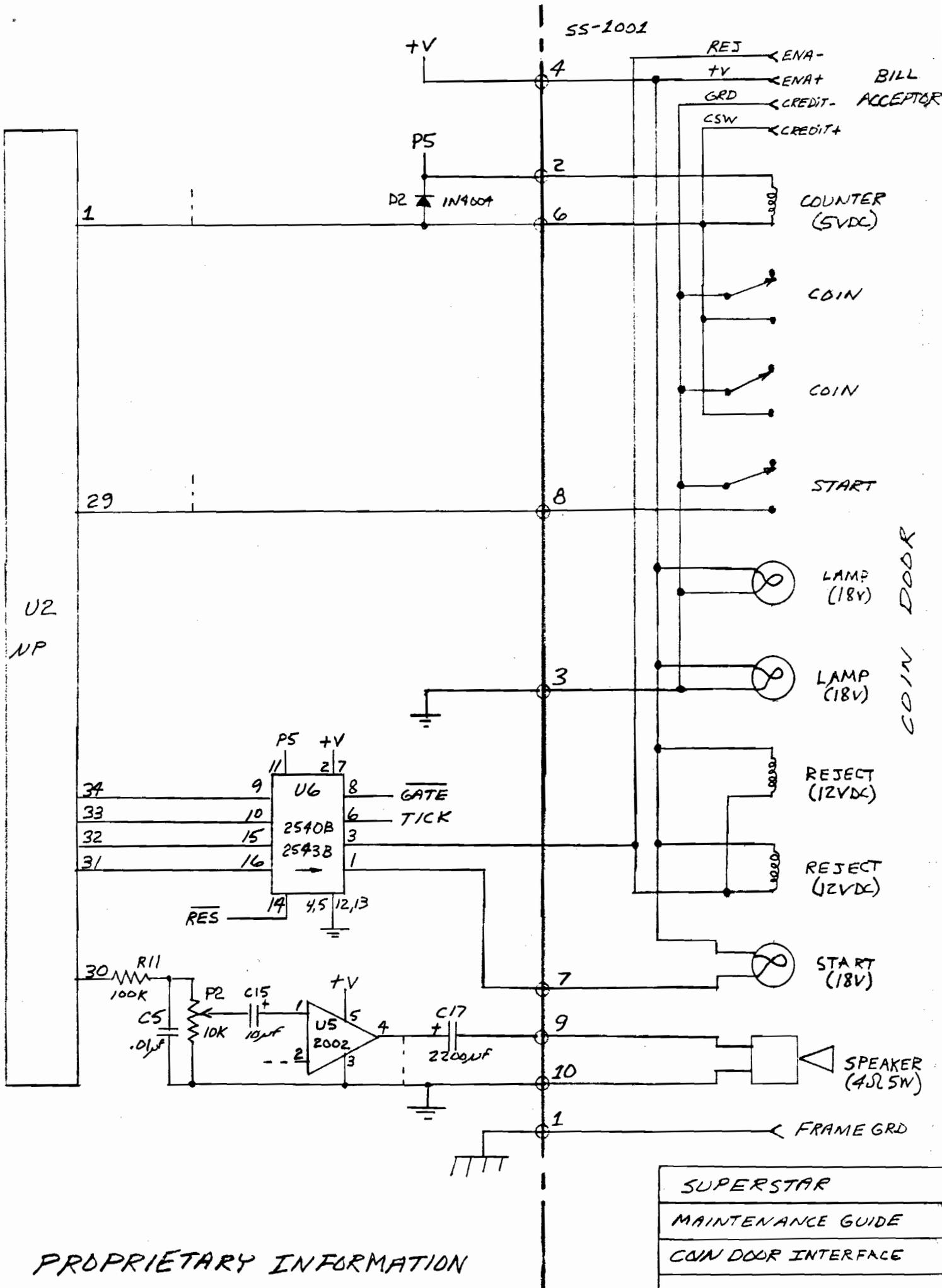
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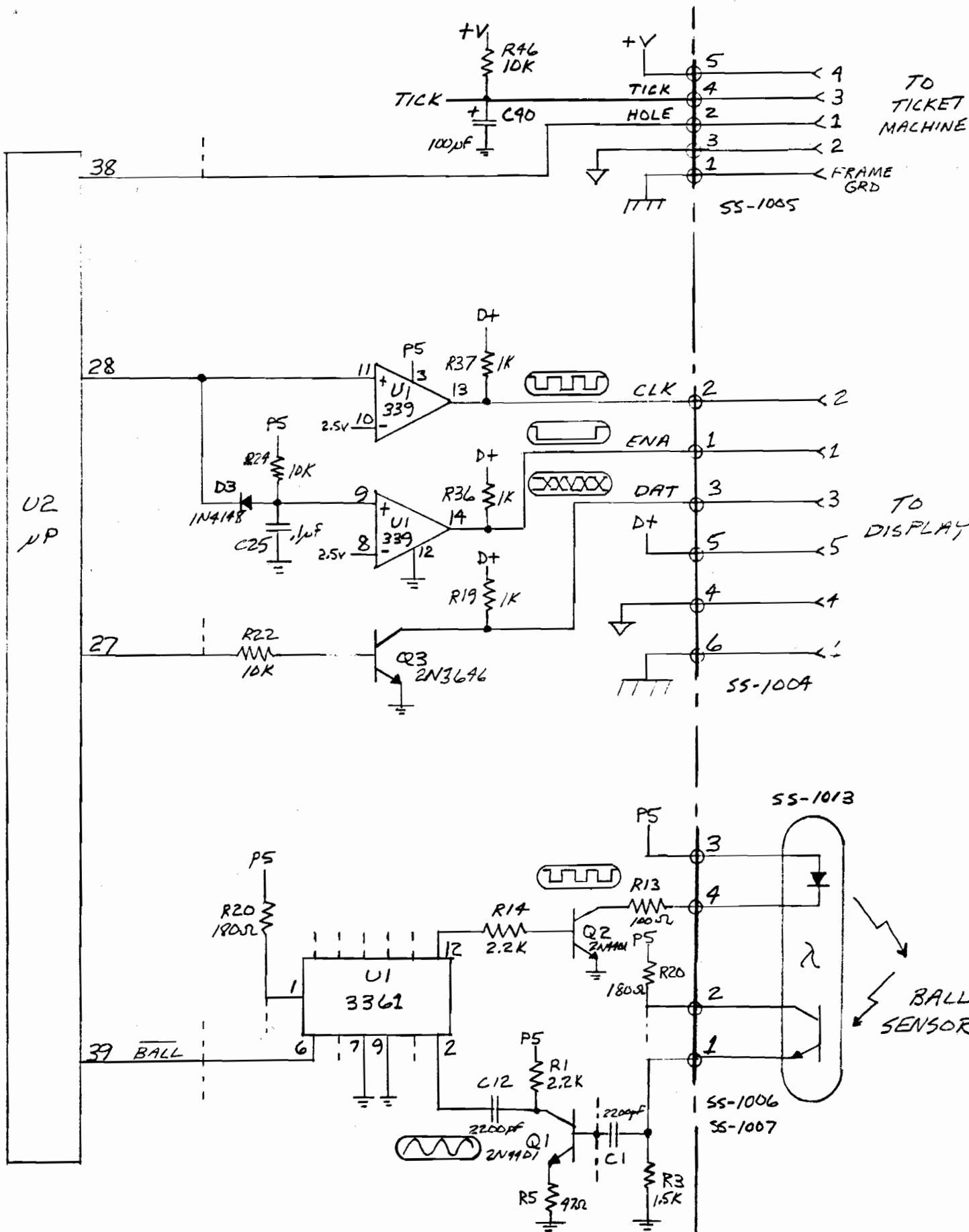
PRDRIETARY INFORMATION

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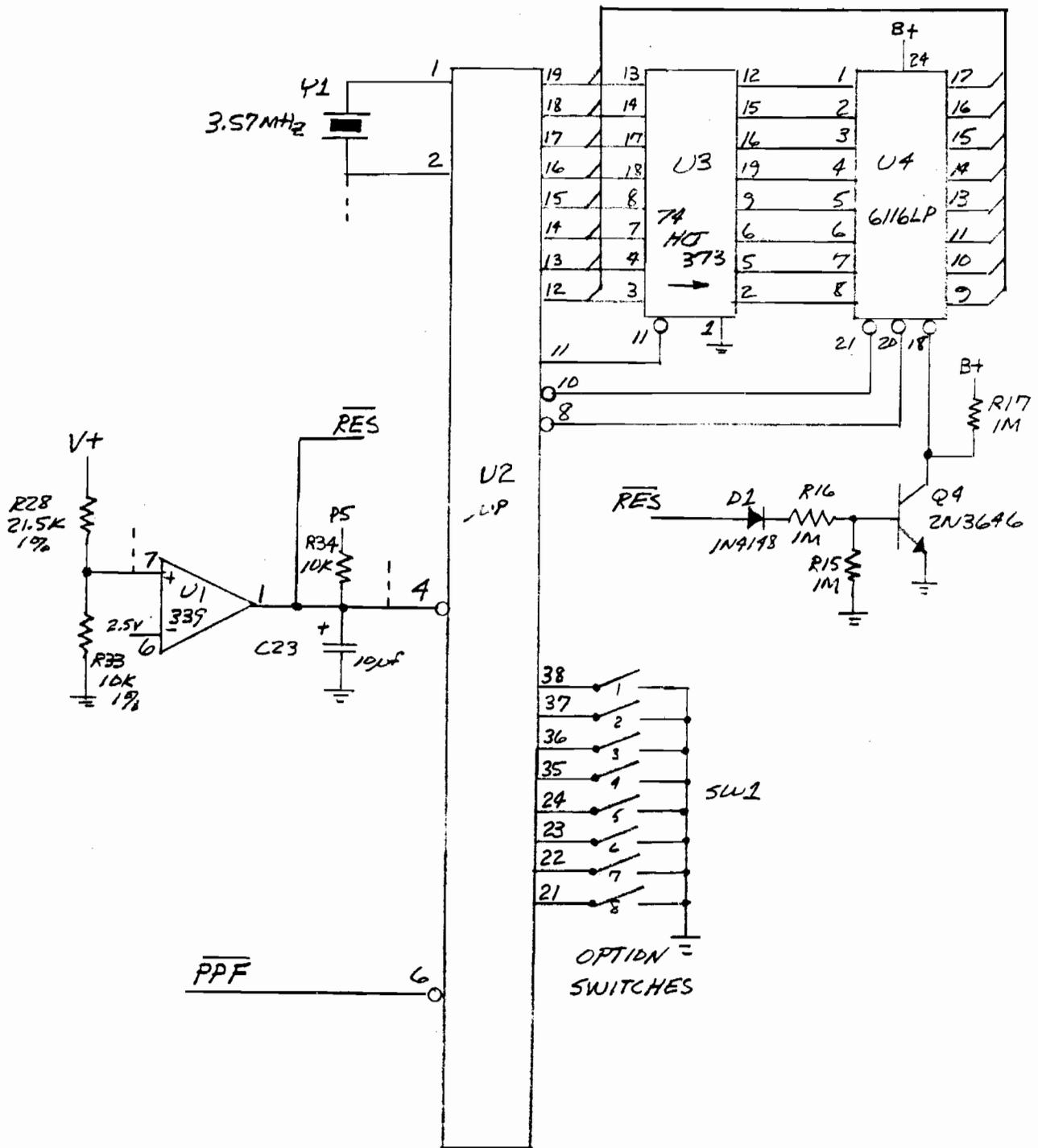
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