



888-538-1000
TEL (561) 588-5200
FAX (561) 493-2999
PARTS FAX (561) 493-2990
www.benchmarkgames.com

51 Hypoluxo Rd.
Hypoluxo, FL 33462-4501

GOLDZONE



**PLEASE READ FIRST BEFORE
PLUGGING IN MACHINE**

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DEAR CUSTOMER:

THANK YOU FOR PURCHASING BENCHMARK GAME'S GOLD ZONE GAME.

BECAUSE OF THE DIFFERENT NEEDS OF EVERY LOCATION, YOU MAY NEED TO FINE TUNE THE MACHINE IN THE FUTURE. WE STRONGLY SUGGEST THAT YOU LEAVE THE MACHINE AT FACTORY SETTINGS FOR AT LEAST 2 TO 3 WEEKS. AFTER THIS TIME IF YOU FIND NECESSARY YOUR PAYOUT TOO LOW OR TOO HIGH, THEN MAKE THE PROPER ADJUSTMENTS. START FIRST WITH THE FACTORY DEFAULT SETTINGS.

YOU WILL FIND ENCLOSED IN THE MANUAL A SET OF INSTRUCTIONS ON HOW TO PROGRAM YOUR MACHINE SHOULD YOU NEED TO.

PLEASE READ THE MANUAL BEFORE YOU CALL US FOR ANY INFORMATION. WHEN YOU CALL PLEASE HAVE THE SERIAL NUMBER FOR YOUR GAME IN HAND.

**BENCHMARK GAMES, INC.
51 HYPOLUXO RD.
HYPOLUXO, FL 33462
561-588-5200
PARTS FAX: 561-493-2990**

WARNING:

DO NOT TURN GAME ON UNTIL THE FOLLOWING INSTRUCTIONS ARE READ AND UNDERSTOOD.

FAILURE TO ADHERE TO THE FOLLOWING INSTRUCTIONS WILL VOID ANY FACTORY WARRANTIES AND COULD RESULT IN DAMAGE TO THE GAME AND OR INJURY TO THE PLAYER OR TECHNICIAN.

THIS GAME SHOULD BE PLUGGED INTO A 3 WIRE GROUNDED OUTLET 115VAC 60 HZ. UNLESS OTHERWISE SPECIFIED.

FCC PART 15 RULE:

THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A COMPUTING DEVICE PURSUANT TO SUB-PART J OF PART 15 OF FCC RULES.

ELECTRICAL SPECIFICATIONS:

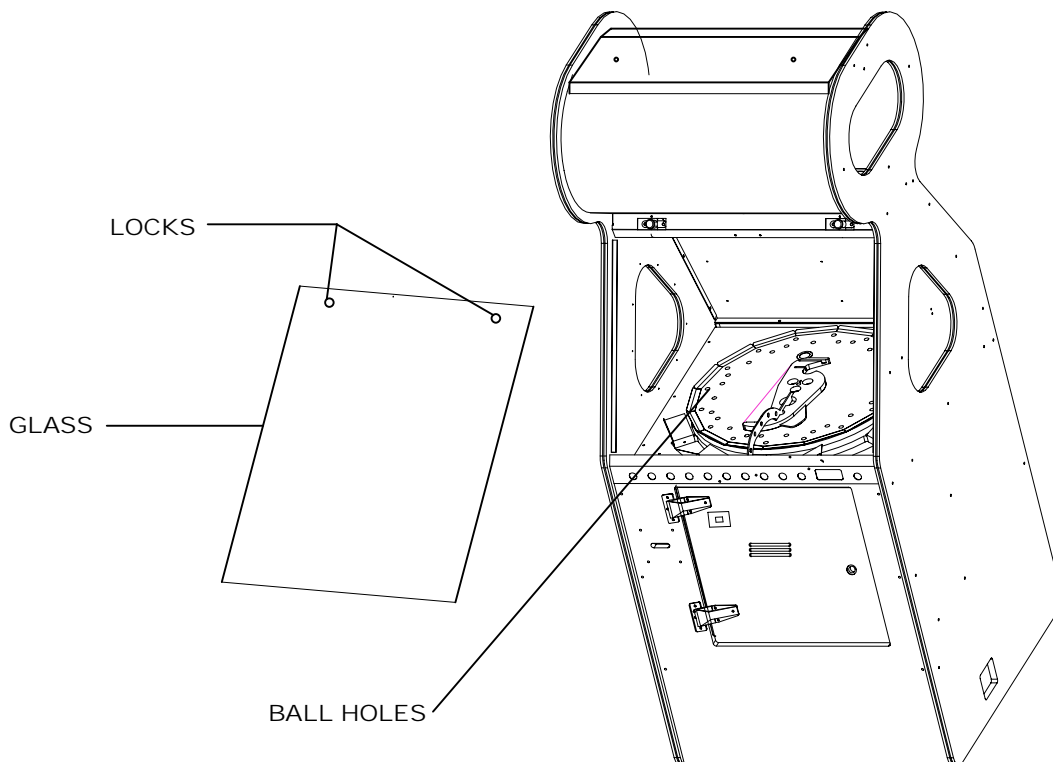
POWER CONSUMPTION	1.5 AMP 180 WATT
LINE VOLTAGE	100-130VAC 60HZ.
LINE FUSE	5 AMP

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THE GAME, TECHNICAL MANUAL, GRAPHIC DESIGNS AND SCHEMATIC DIAGRAMS ARE PROTECTED BY THE U.S. COPYRIGHT ACT OF 1979. BENCHMARK GAMES WILL ENFORCE ITS COPYRIGHT AND PATENTS AGAINST INFRINGERS.

GOLDZONE SETUP

1. REMOVE GAME FROM BOX.
2. OPEN WOOD DOOR AND REMOVE CASHBOX. REMOVE THE POWER PLUG, SPINNER ASSEMBLY AND THE PLATTER BALLS,(7/16" METAL BALLS).
3. REMOVE THE GLASS BY UNLOCKING THE LOCKS AT THE TOP CORNERS OF THE GLASS AND PULLING THE GLASS OUT,(NOTE: THE COIN MECH WILL BECOME UNPLUGGED).
4. INSTALL THE 3 WHEELED HUB ONTO THE CENTER SHAFT OF THE ROTATING PLATTER, THEN INSTALL THE ALUMINUM SPINDLES ON TOP OF THE HUBS.
5. INSTALL THE PLATTER BALLS INTO THE HOLES ON THE PLATTER.
6. TURN GAME ON AND SLOWLY START PUTTING COINS ONTO THE PLAYFIELD TO SEED THE GAME. KEEP PUTTING ON COINS UNTIL COINS ARE FALLING OFF THE PLAYFIELD ALL AROUND THE PLATTER,(THE PLATTER IS NOW FULLY SEEDDED).
7. REASSEMBLE THE GLASS ON ALL ,(MAKING SURE YOU PLUG IN THE COIN MECHS WHILE INSTALLING THE GLASS).
8. USING THE POWER PLUG, PLUG IN THE GAME ON THE RIGHT SIDE OF THE GAME ON THE OUTSIDE AND TURN POWER SWITCH ON,(LOCATED WHERE THE PLUG GOES INTO THE CABINET).



GAME DESCRIPTION

THERE IS A ROTATING PLATTER THAT TURNS AT A CONSTANT SPEED. THE 4 DIGIT LED'S AT THE TOP OF EACH PLAYER KEEPS TRACK OF THE JACKPOT AMOUNT AND THE TICKETS OWED. COINS CAN BE INSERTED AS FAST,(RAPID PLAY), AS THE PLAYER CAN INSERT THEM.

GAMEPLAY

THE PLAYER INSERTS A COIN INTO THE GAME, THE COIN THEN SLIDES DOWN THE COIN RAMPS ONTO THE ROTATING PLATTER. THE ROTATING PLATTER CAUSES THE COIN TO MOVE DOWN THE POINTER TO THE OUTSIDE OF THE PLATTER . IF THE COIN FALLS INTO THE JACKPOT HOLES, THEN THE JACKPOT AMOUNT ON THE LEFT 4 DIGIT DISPLAY IS PAID.

NOTE: THE JACKPOT COUNTER WILL INCREMENT FOR EVERY COIN PLAYED .

IF COINS FALL OFF THE PLAYFIELD THEY ARE COUNTED BY THE HOPPER AND THE APPROPRIATE AMOUNT OF TICKETS ARE PAID OUT.

SECURITY: ON POWER UP THE HOPPER EMPTIES ANY COINS IN IT BUT DOES NOT PAY OUT THE TICKETS. THE SAME ACTION HAPPENS IF THE GAME IS TILTED. THE TILT BOB IS LOCATED ON THE LEFT INSIDE CABINET. THERE IS A TIMER BUILT INTO THE SOFTWARE THAT ONLY ALLOWS TICKETS TO BE PAID OUT AFTER VERIFYING THAT A COIN WENT THROUGH THE COIN MECH.

VER. 01.2

COIN MECH SETUP

WHEEL DEAL USES A COIN COMPARATOR. A SAMPLE COIN MUST BE INSERTED AND LEFT IN THE MECH AS SHOWN BELOW. WHEN THE PLAYER INSERTS A COIN FOR GAMEPLAY, THE MASS OF THE COIN IS MEASURED AGAINST THE SAMPLE COIN AND IS ACCEPTED OR REJECTED.

THE COIN MECH SWITCH ON THE SIDE MUST BE SET TO N.O.(NORMALLY OPEN), NOT N.C. (NORMALLY CLOSED).

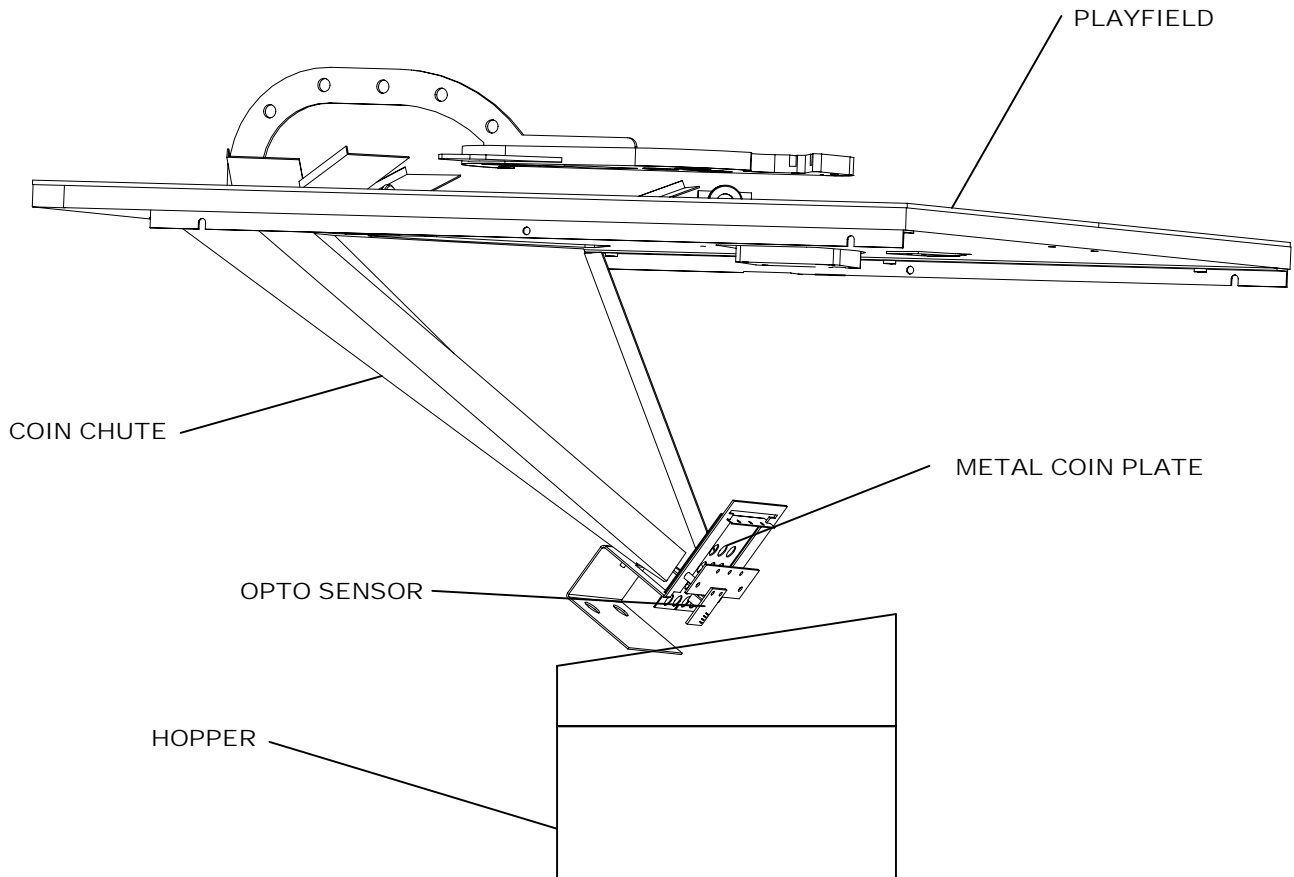
THE PULSE TIME 3 POSITION SWITCH SHOULD BE SET AT THE SHORTEST PULSE TIME.

THERE IS A SENSITIVITY ADJUSTMENT ON THE SIDE OF THE MECH. STRICT MAKES THE MECH MORE DISCREET,(WILL REJECT MORE COINS IF THEY ARE NOT PERFECT). SLACK MAKES THE MECH NOT SO DIFFICULT ABOUT THE COINS IT WILL ACCEPT.

COIN CHUTE DESCRIPTION

WHEN COINS FALLS OFF THE PLAYFIELD, THEY SLIDES DOWN THE COIN CHUTE. IT THEN HITS THE METAL COIN PLATE WHICH ACTIVATES THE OPTO SENSOR. WHEN THE OPTO SENSOR IT ACTIVATED, IT STARTS THE HOPPER. THE HOPPER WILL CONTINUE TO RUN UNTIL THERE ARE NO MORE COINS IN IT. AT THIS POINT THE APPROPRIATE AMOUNT OF TICKETS ARE PAID OUT.

THERE IS A LED ON THE BACK OF THE OPTO SENSOR. TO CHECK THAT THE SWITCH AND OPTO ARE WORKING PROPERLY: HIT THE METAL COIN PLATE WITH YOUR HAND AND OBSERVE THE LED ON THE BACK OF THE OPTO SENSOR.



FLOURESCENT AND INCANDESCENT LIGHTS

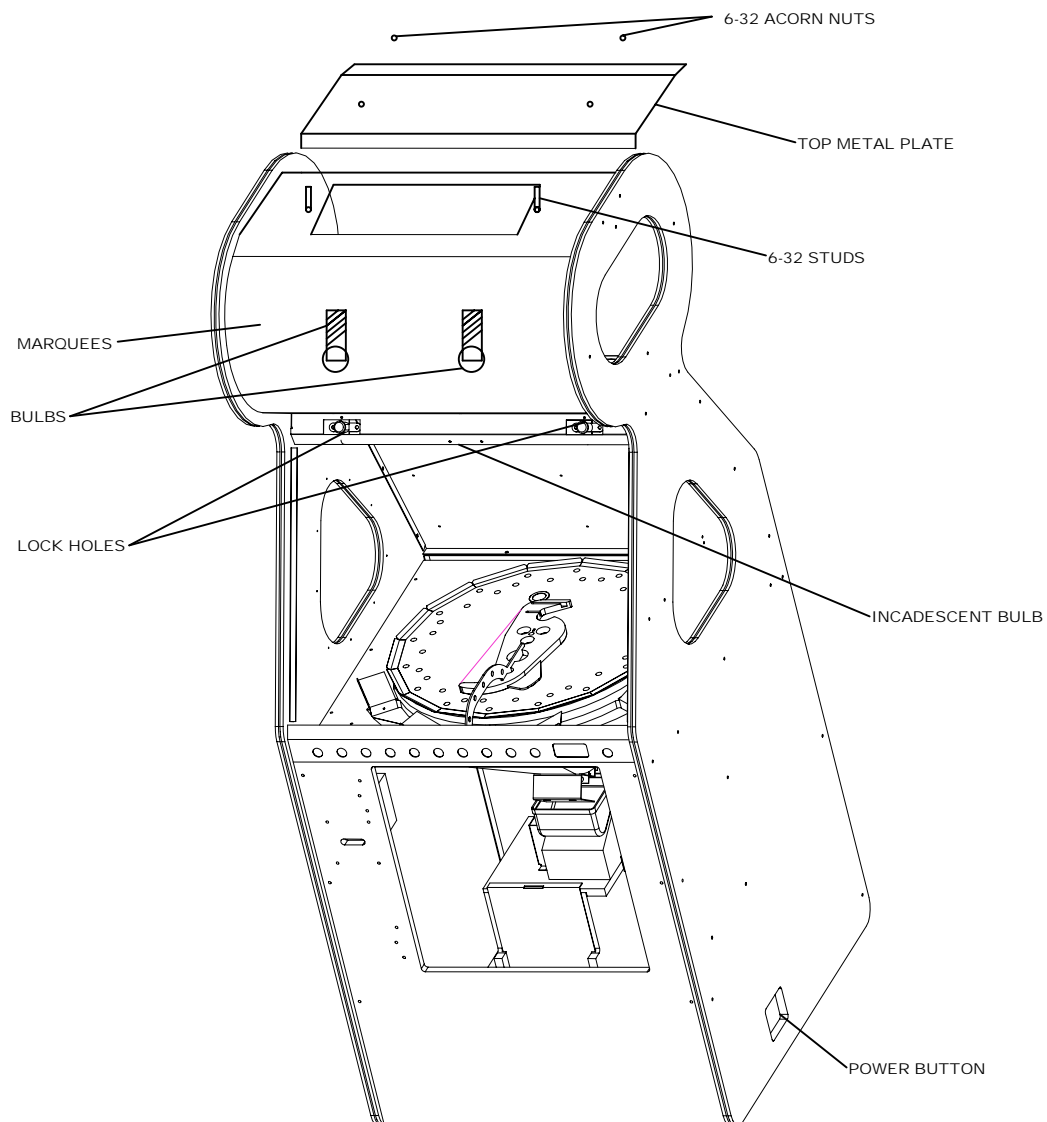
TO REPLACE THE FLOURESCENT LIGHT IN A GOLD ZONE:

1. REMOVE THE 2 6-32 ACORN NUTS AND THE TOP METAL PLATE ON THE TOP OF THE GAME.
2. REPLACE THE BULBS.
3. REPLACE THE TOP PLATE WITH THE ACORN NUTS.

NOTE: THE FLOURESCENT LIGHTS ARE 100 WATT SPIRAL FLOURESCENT BULBS AVAILABLE AT MOST HARDWARE STORES.

TO REPLACE INCANDESCENT BULB: NOTE: THE INCANDESCENT BULBS ARE 60 WATT FLOOD LIGHTS.

1. UNSCREW BULB AND REPLACE WITH SAME TYPE.

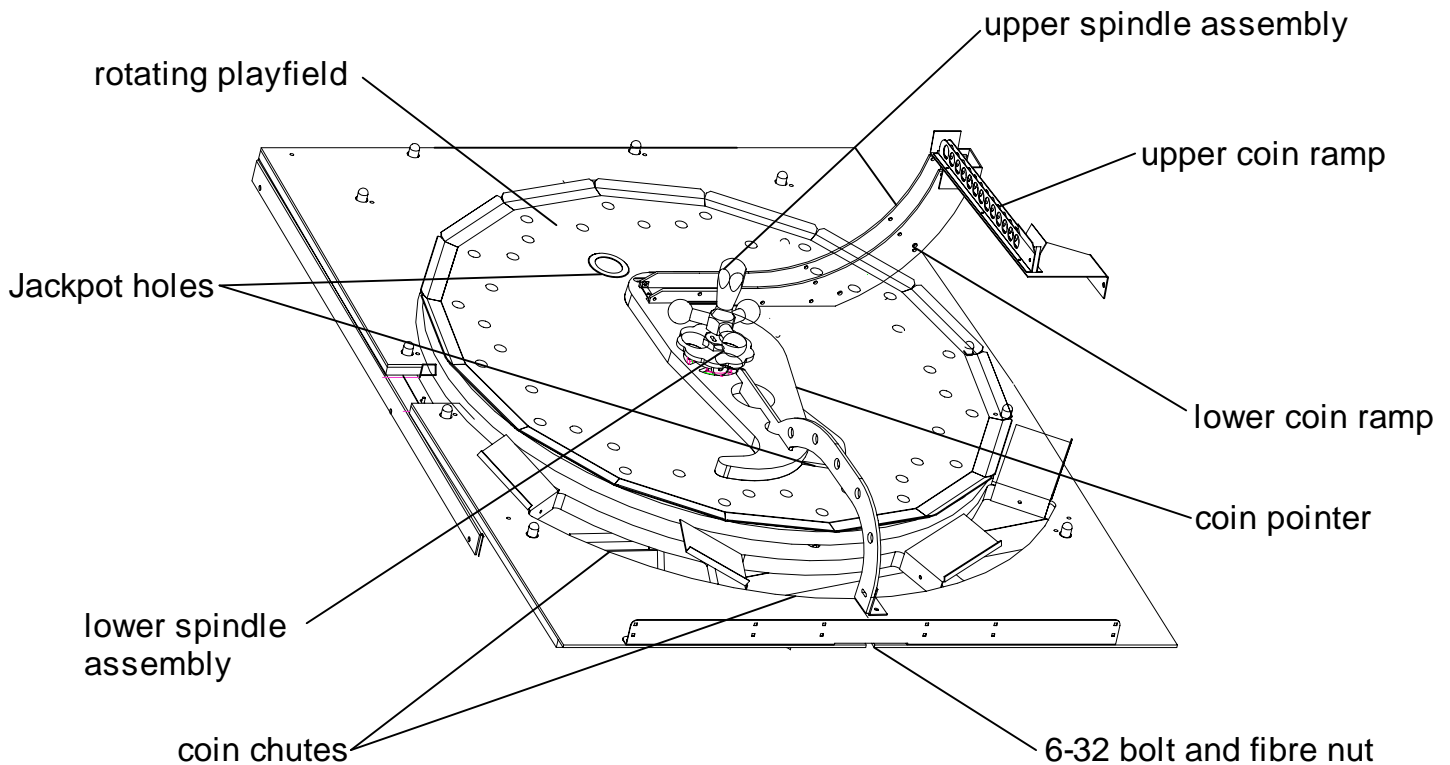


PLAYFIELD ASSEMBLY AND ADJUSTMENTS

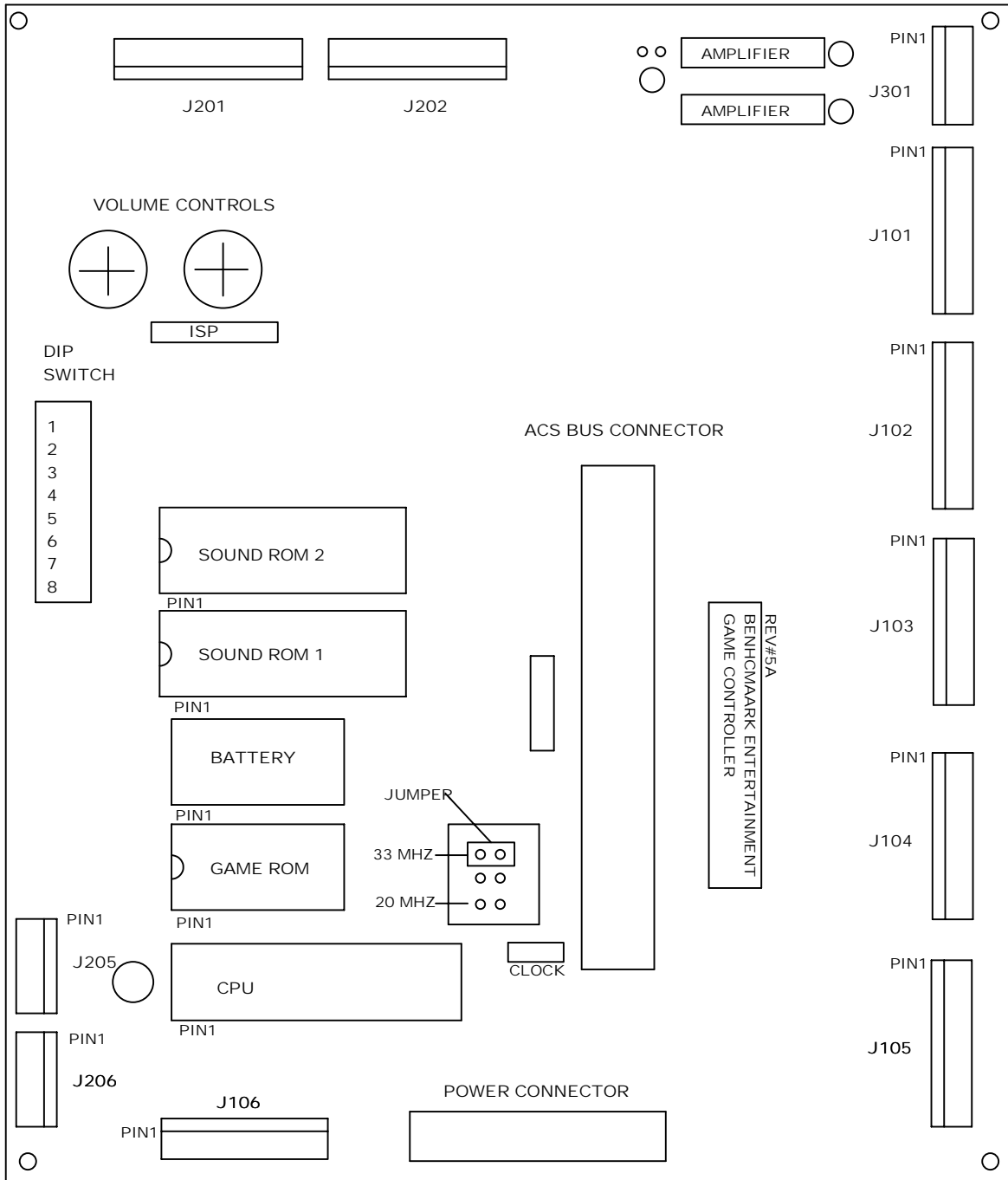
IF YOUR COINS ARE GOING UNDERNEATH THE COIN POINTER BEFORE THEY GET TO THE END OF THE POINTER, OR IF YOUR ROTATING PLAYFIELD IS GETTING SCRATCHED IN A CIRCULAR PATTERN, YOU MAY NEED TO ADJUST THE COIN POINTER HEIGHT.

HOW TO ADJUST:

1. OPEN THE WOOD FRONT DOOR AND LOCATE THE 6-32 BOLT AND FIBER NUT HOLDING THE RED PLASTIC COIN POINTER TO THE METAL BRACKET.
2. LOOSEN THE NUT AND PLACE A .012 FEELER GAUGE IN BETWEEN THE COIN POINTER AND THE ROTATING PLAYFIELD AND TIGHTEN THE NUT.
3. CHECK THE CLEARANCE AT DIFFERENT POINTS ALONG THE COIN POINTER TO MAKE SURE IT HAS EVEN CLEARANCE. RECLEARANCE AS NECESSARY.

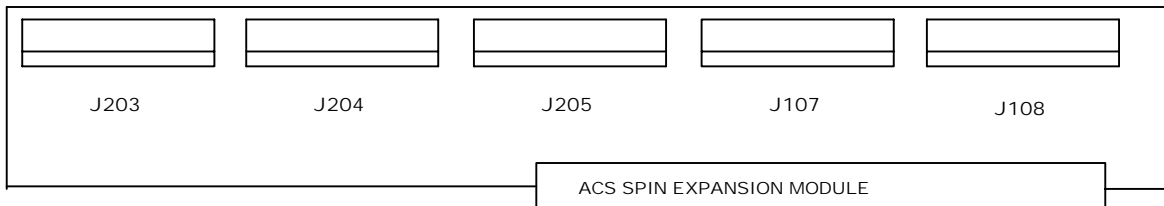


CPU BOARD BLOCK DIAGRAM



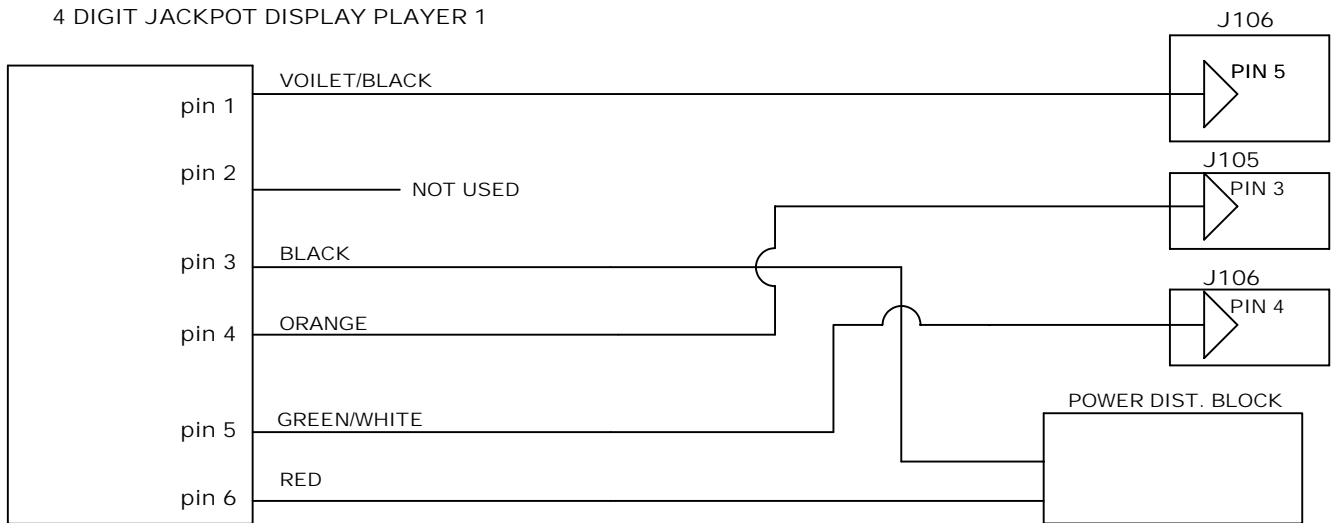
NOTE: THERE HAVE BEEN 5 REVISIONS OF THE BENCHMARK CONTROLLER, ONLY REV 5 WILL WORK IN GOLDZONE. THE JUMPER ON THE MHZ MUST BE SET AT 33 MHZ AS SHOWN ON THE PICTURE ABOVE. BE CAREFULL WITH THE CONNECTORS NOT TO PUT THEM ONE PIN OFF OR BEND ANY OF THE PINS.

EXPANSION BOARD

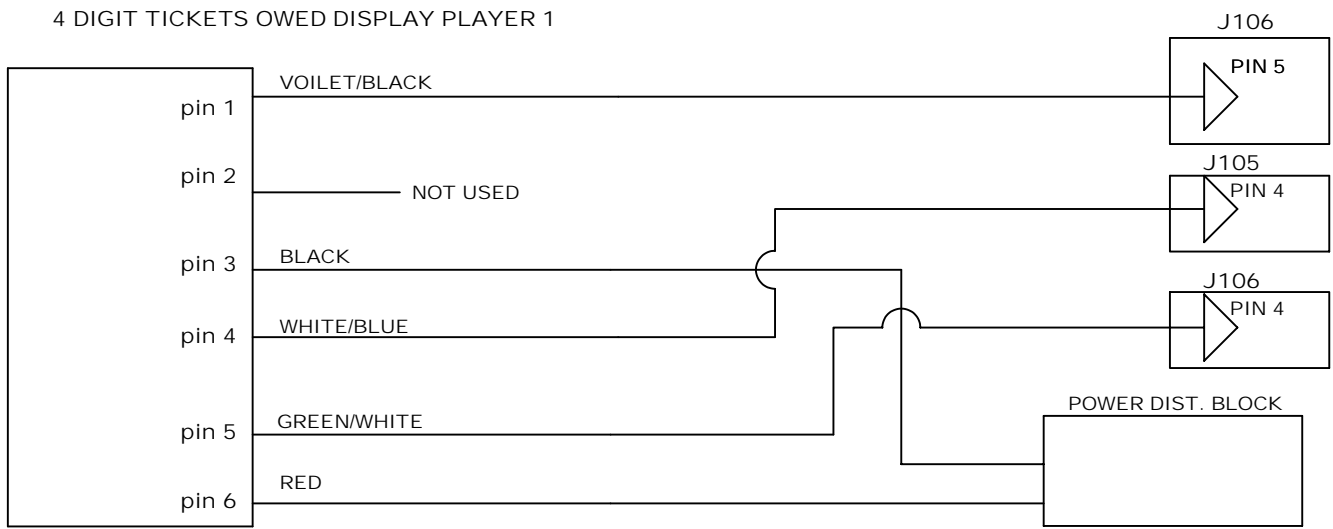


Schematic:

4 DIGIT JACKPOT DISPLAY PLAYER 1

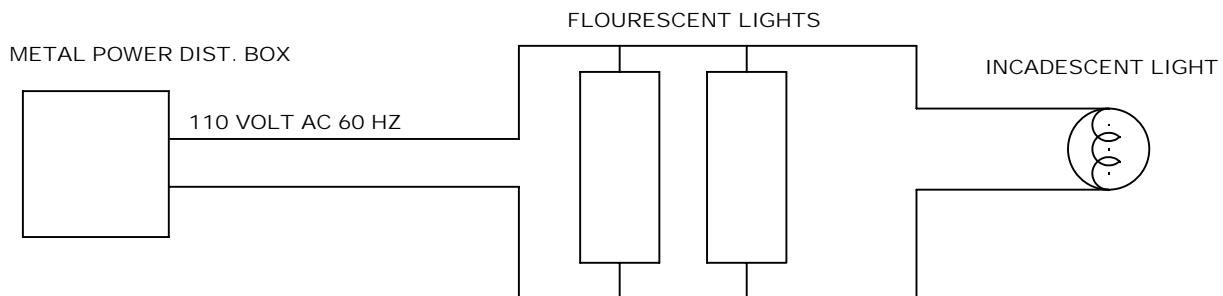


4 DIGIT TICKETS OWED DISPLAY PLAYER 1

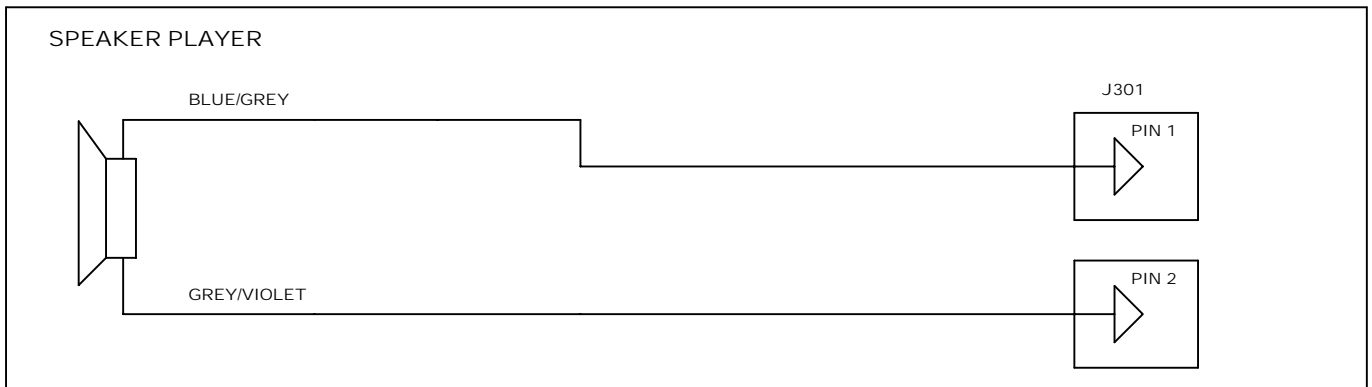
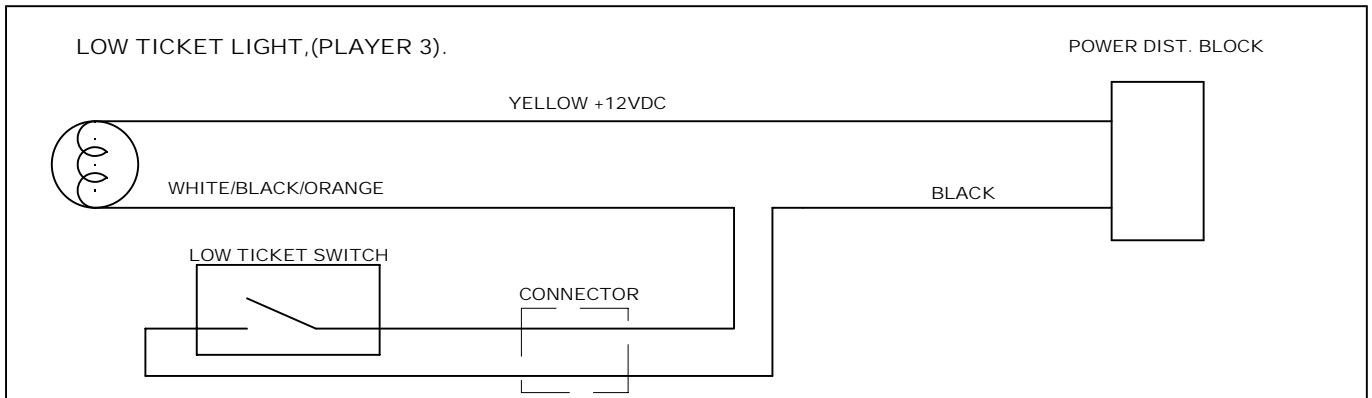
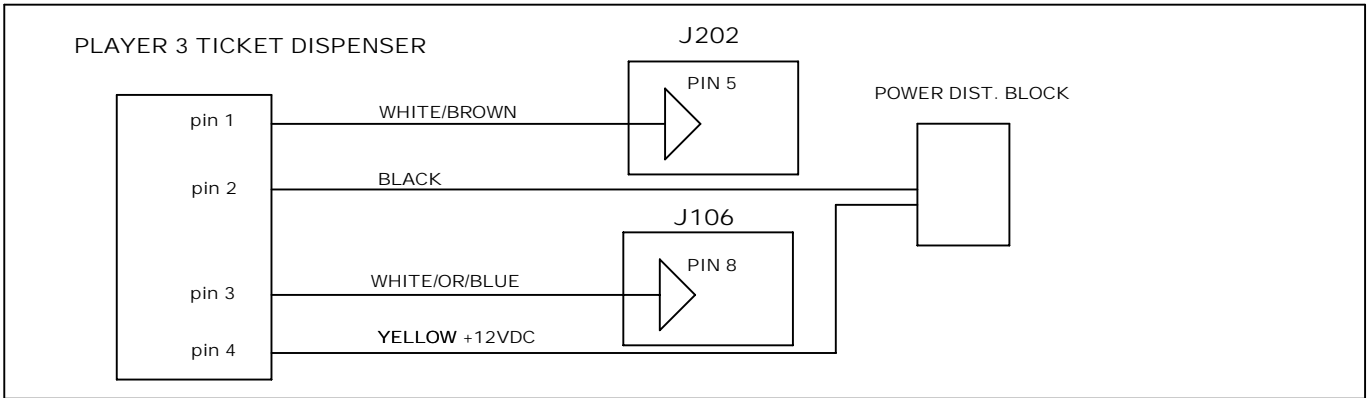


SPIRAL FLOURESCENT AND INCADESCENT
PLAYFIELD FLOOD LIGHTS

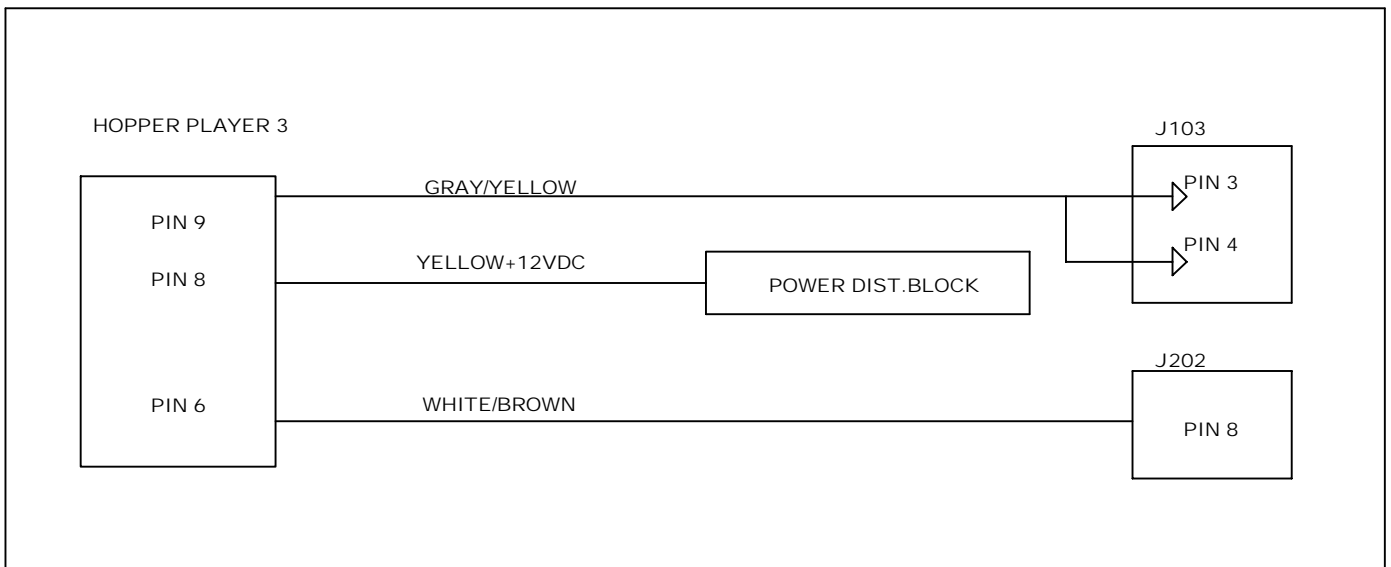
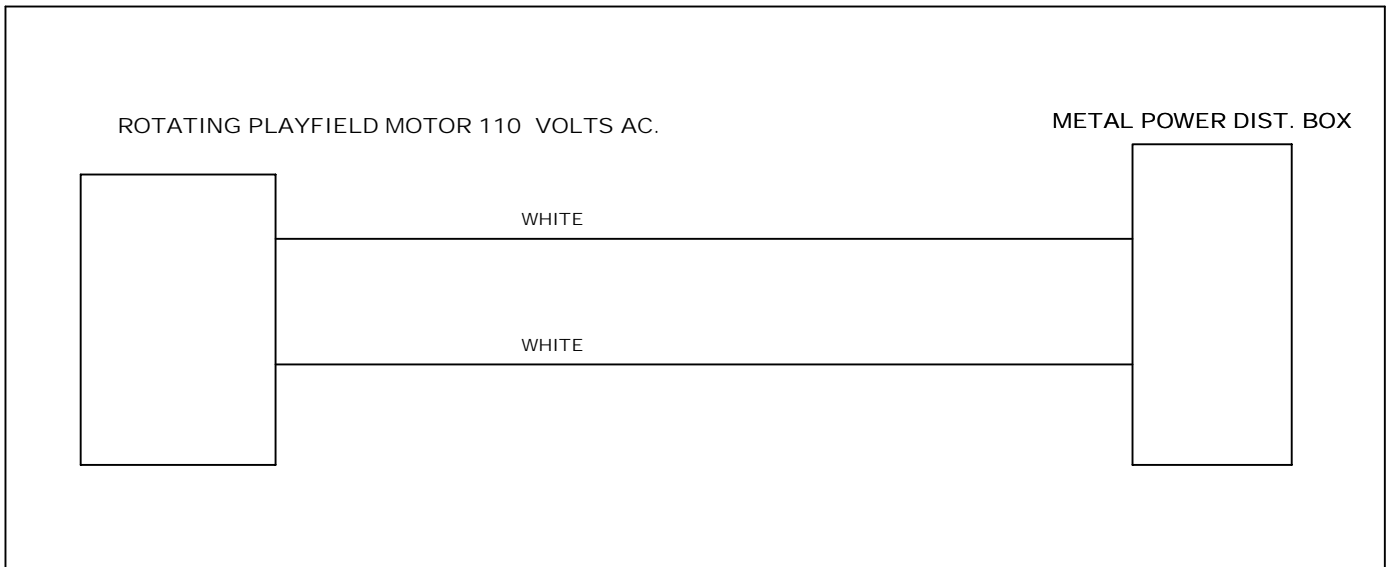
NOTE: REPLACE FLOURESCENT BULBS WITH ONLY 100
WATT EQUIVALENT SPIRAL FLOURESCENT BULBS.
NOTE: REPLACE INCANDESCENT BULB WITH
60 WATT FLOOD LIGHT ONLY.



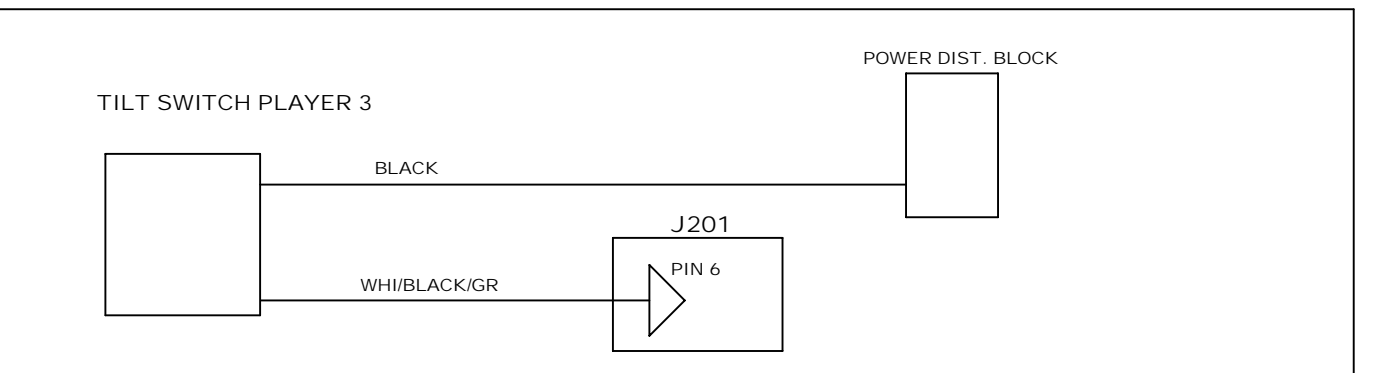
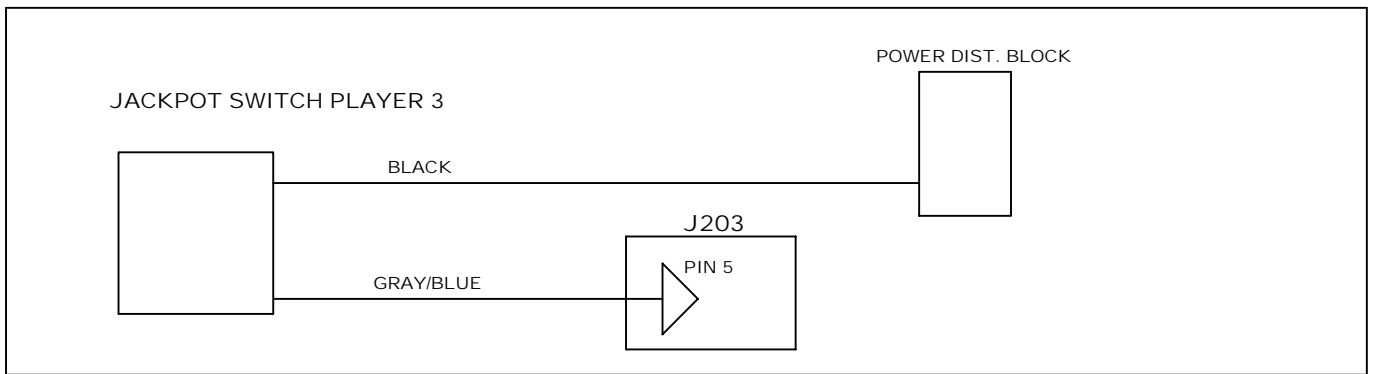
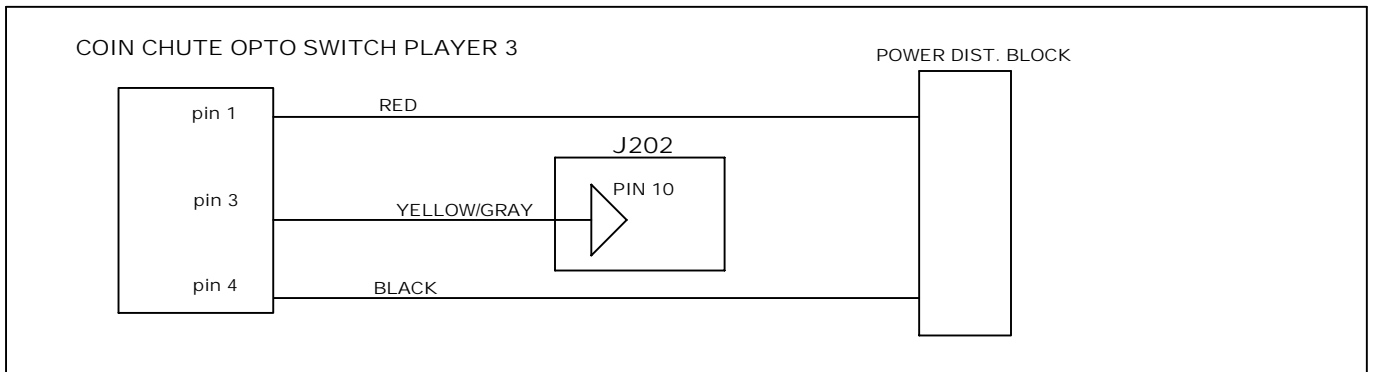
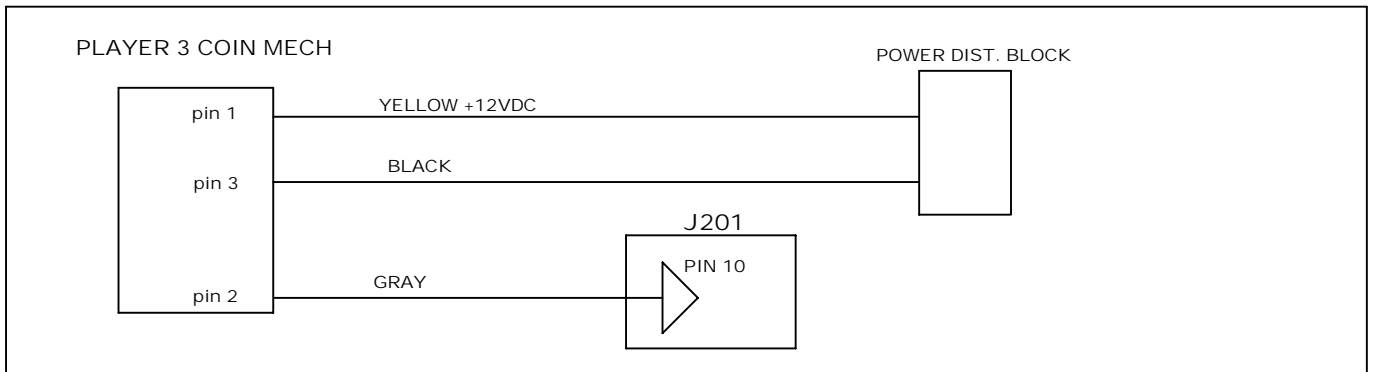
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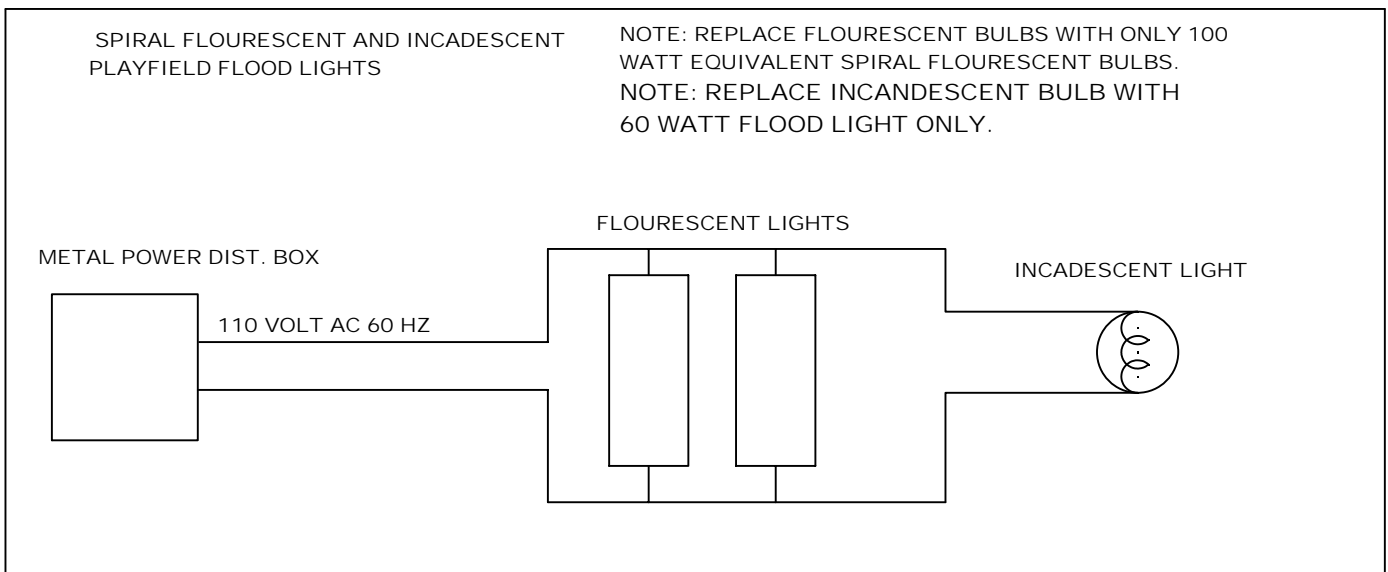
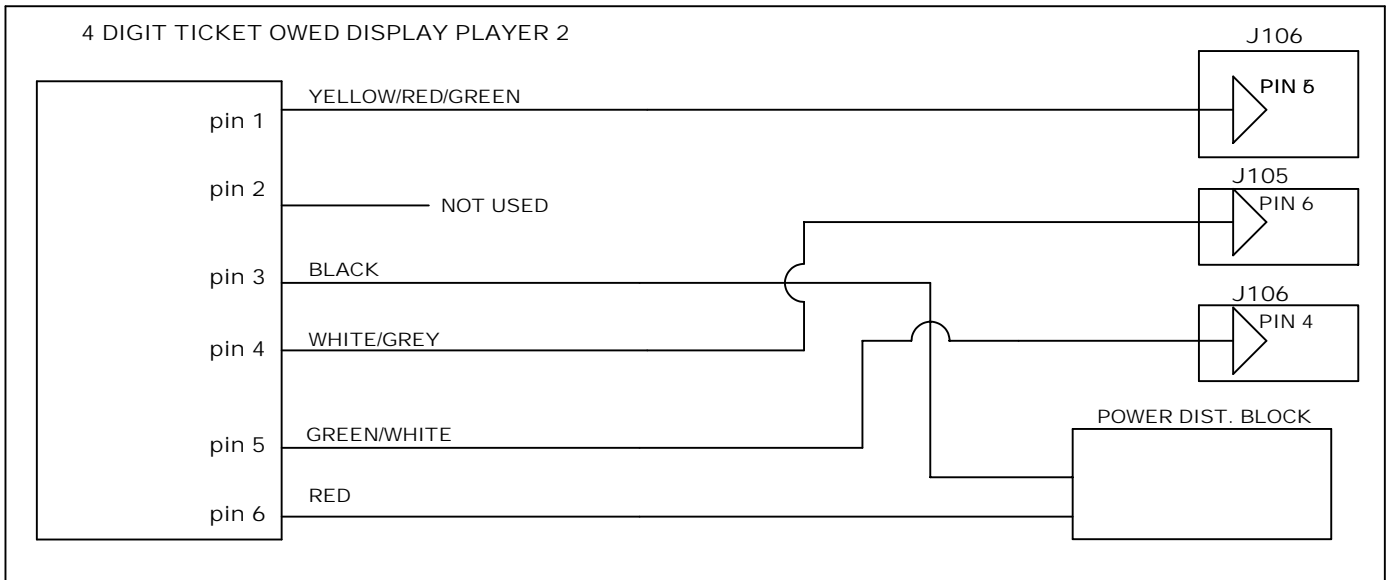
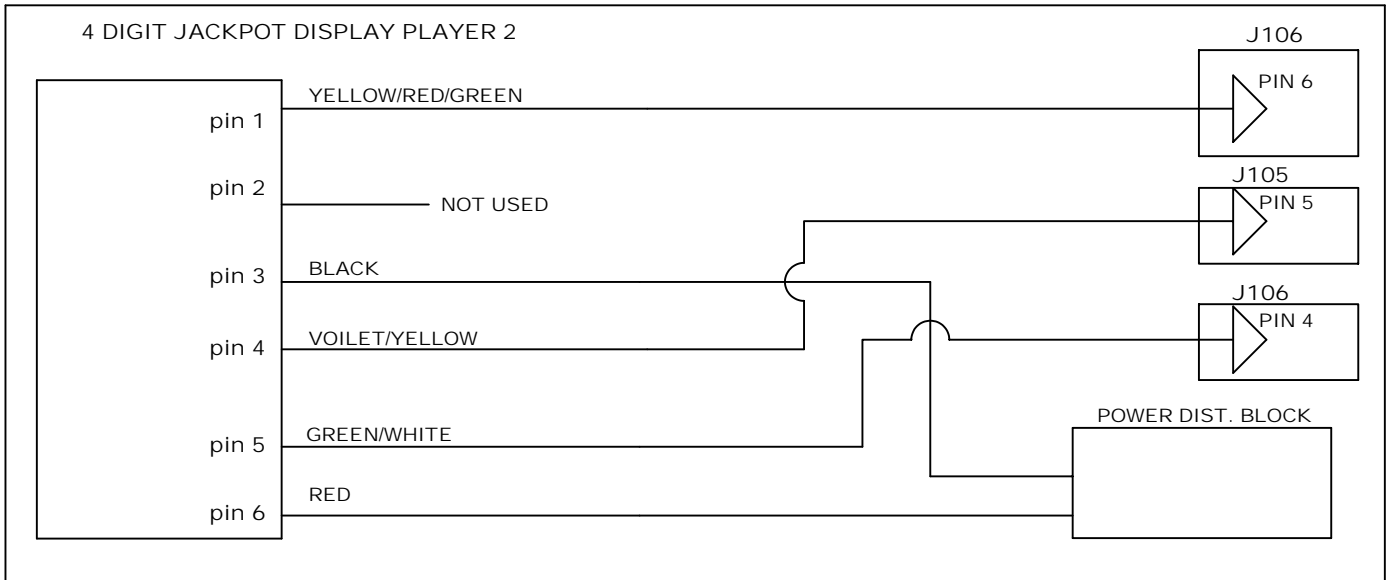
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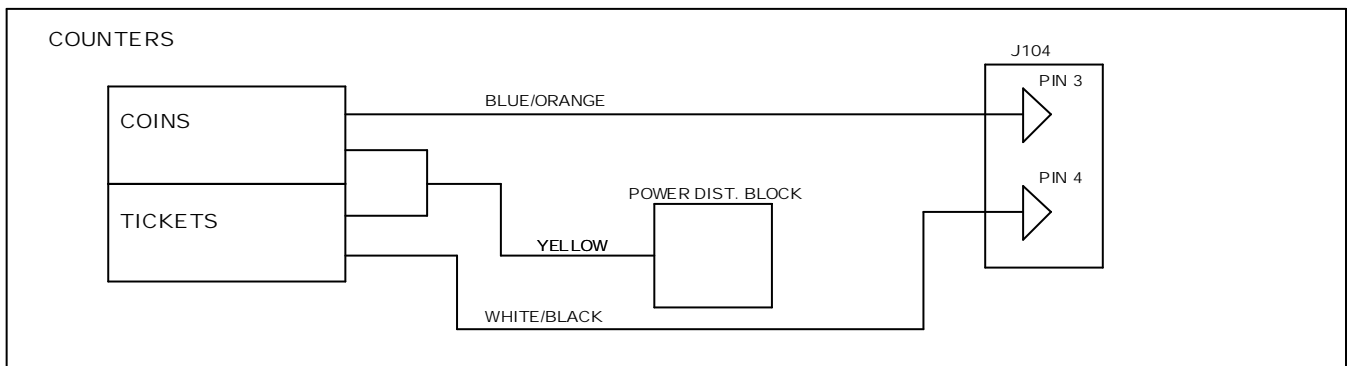
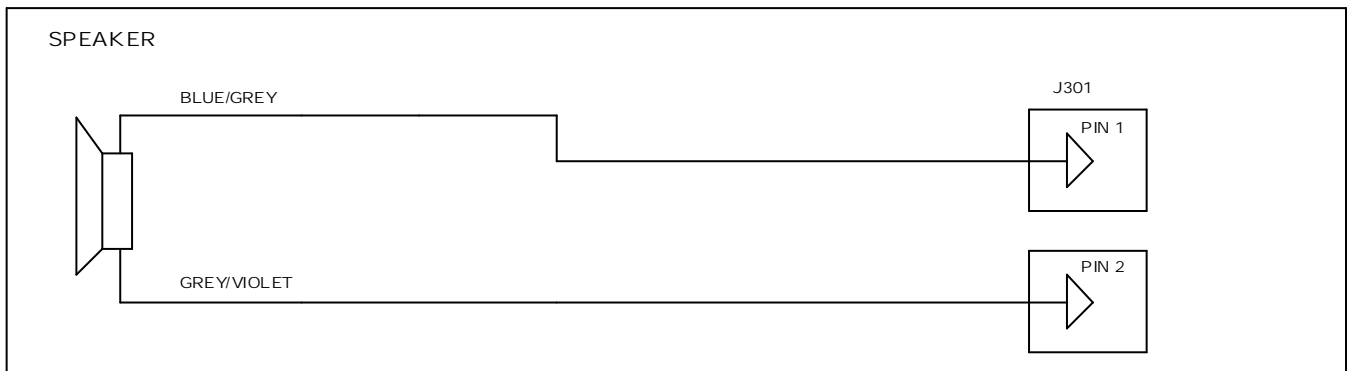
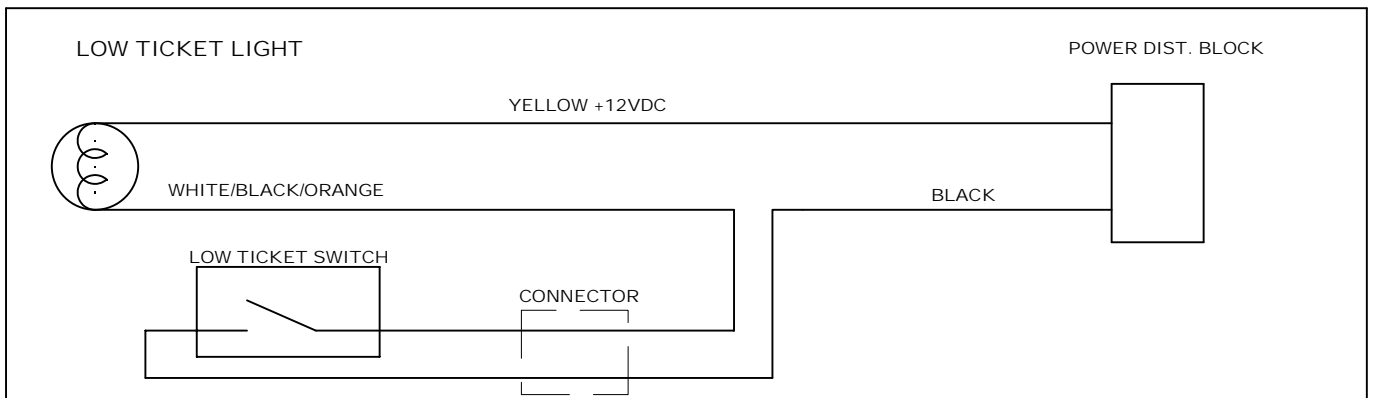
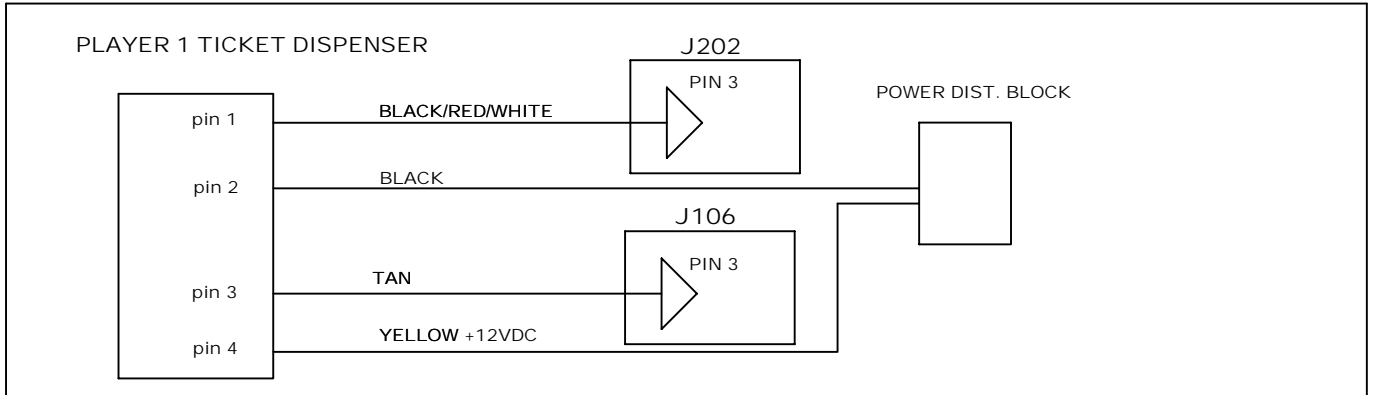
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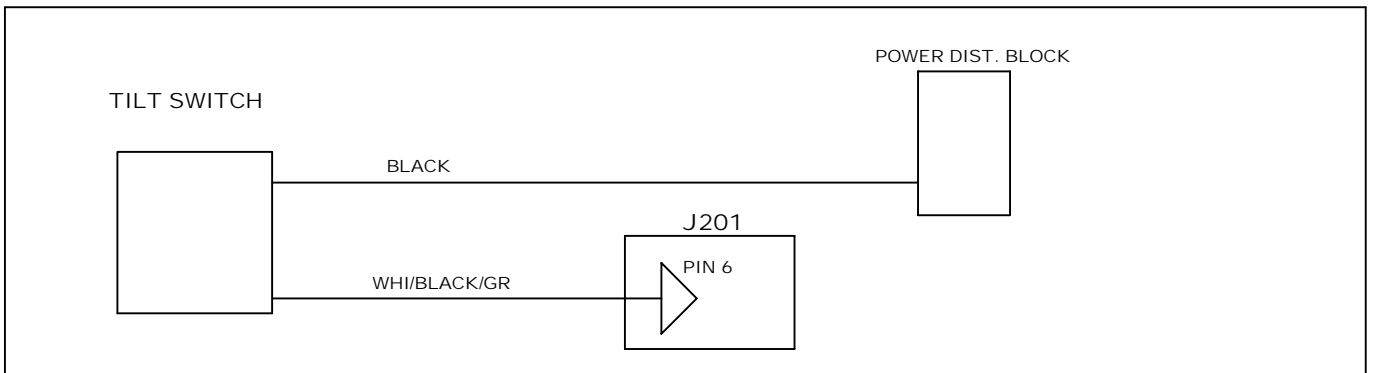
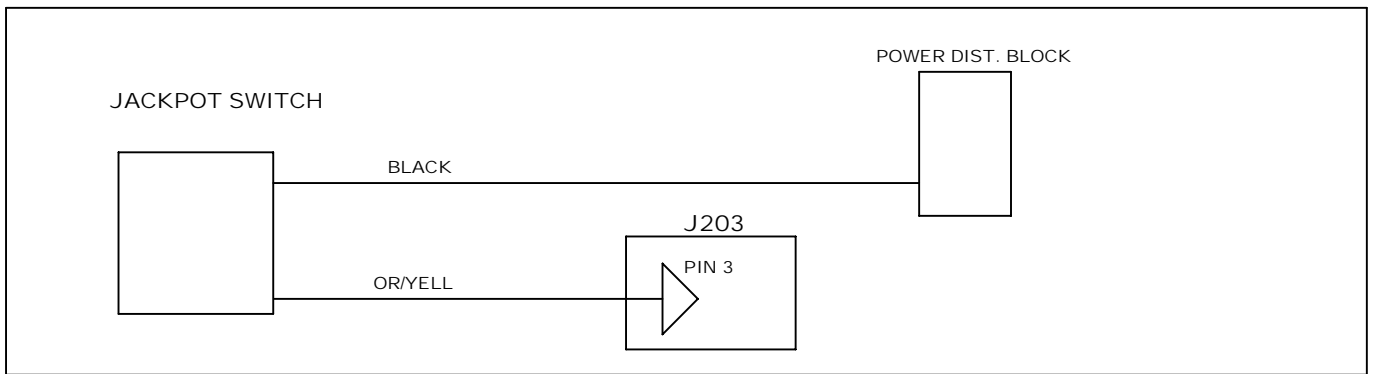
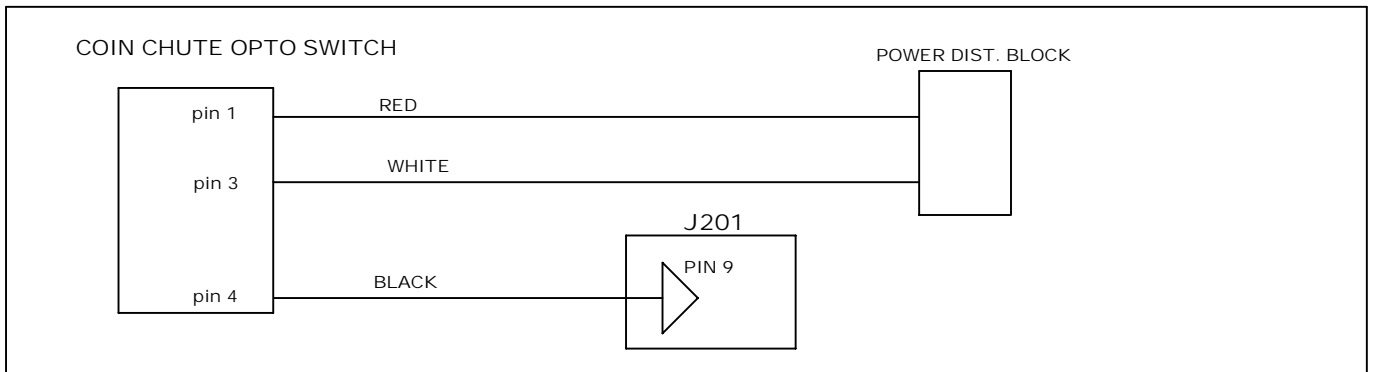
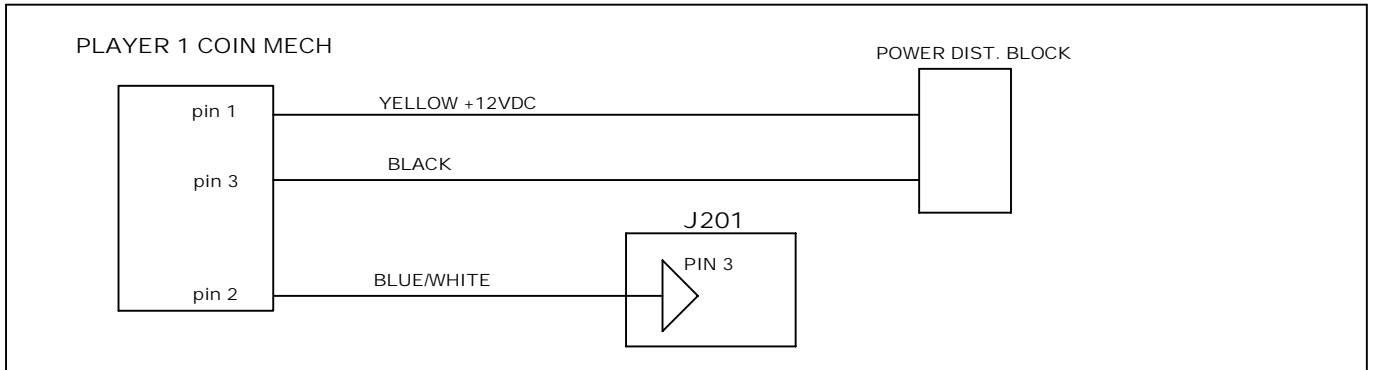


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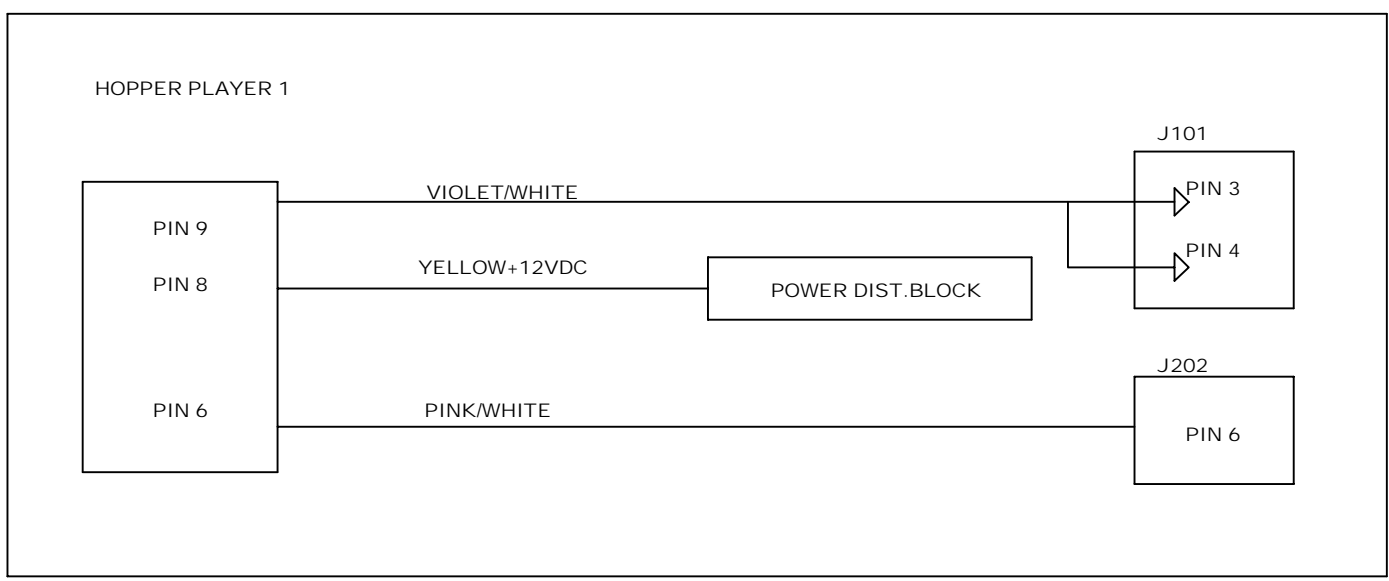
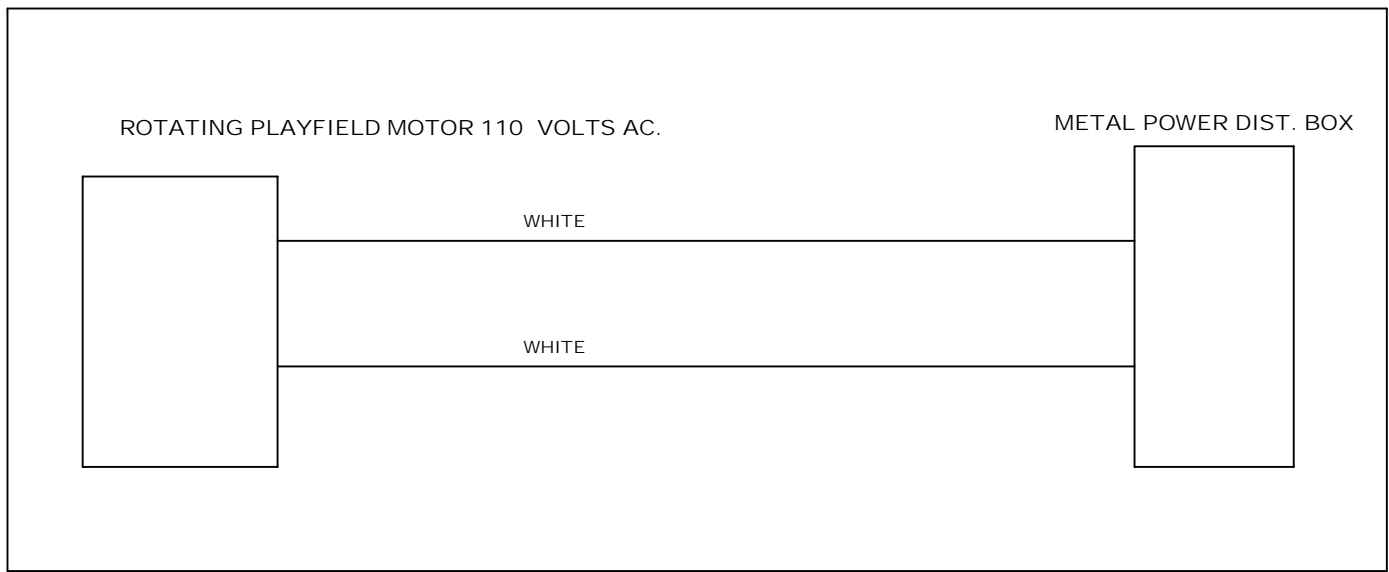


Schem-3

Schematic:

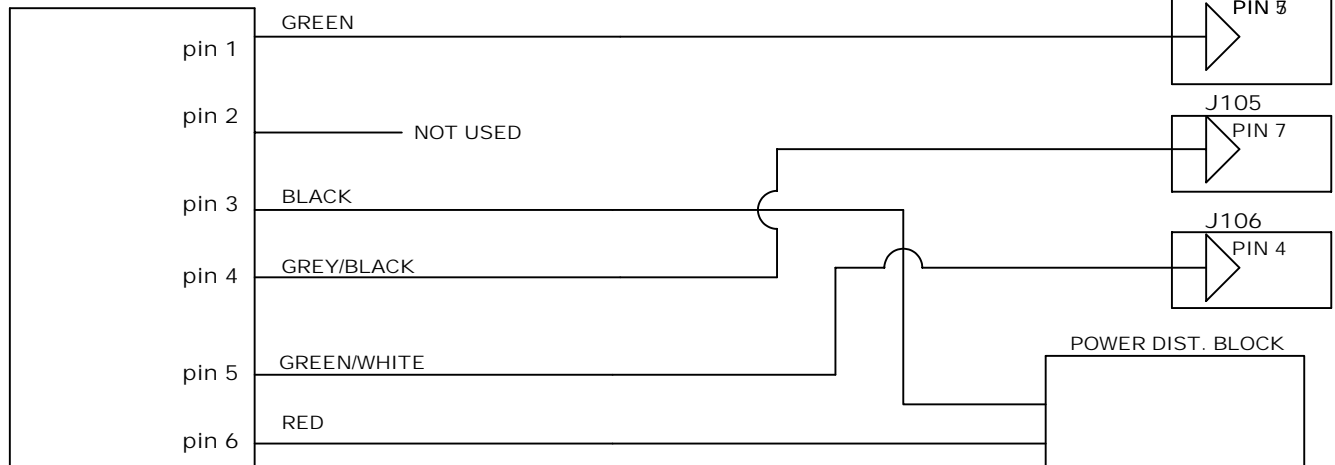


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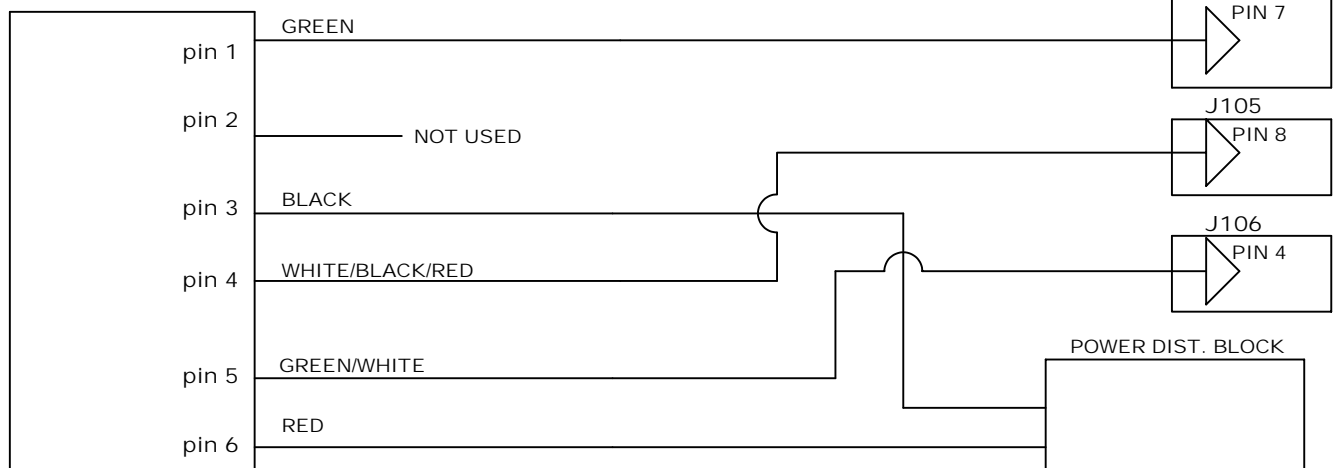


Schematic:

4 DIGIT JACKPOT DISPLAY PLAYER 3

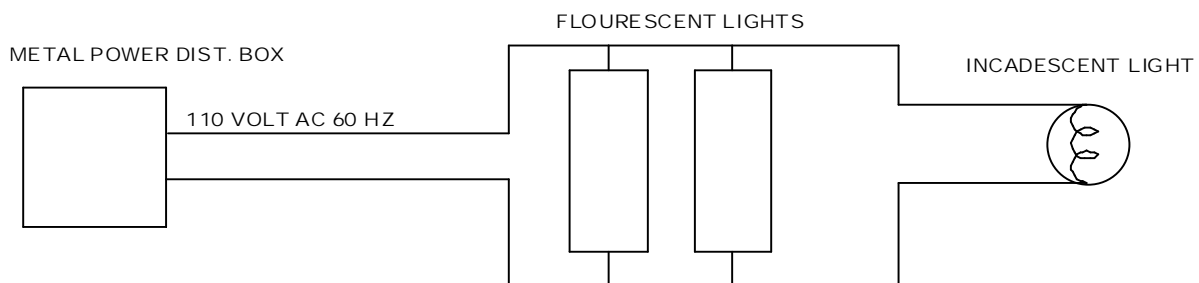


4 DIGIT TICKET OWED PLAYER 3



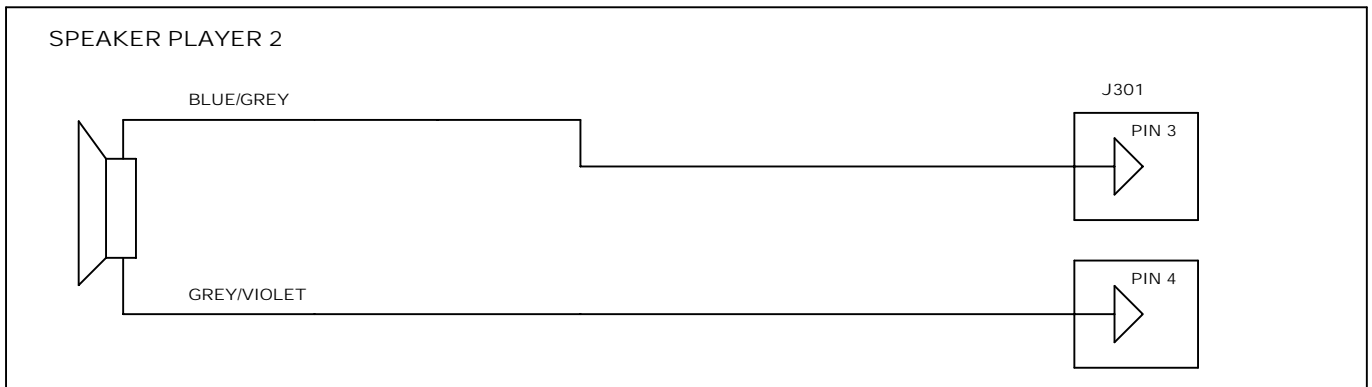
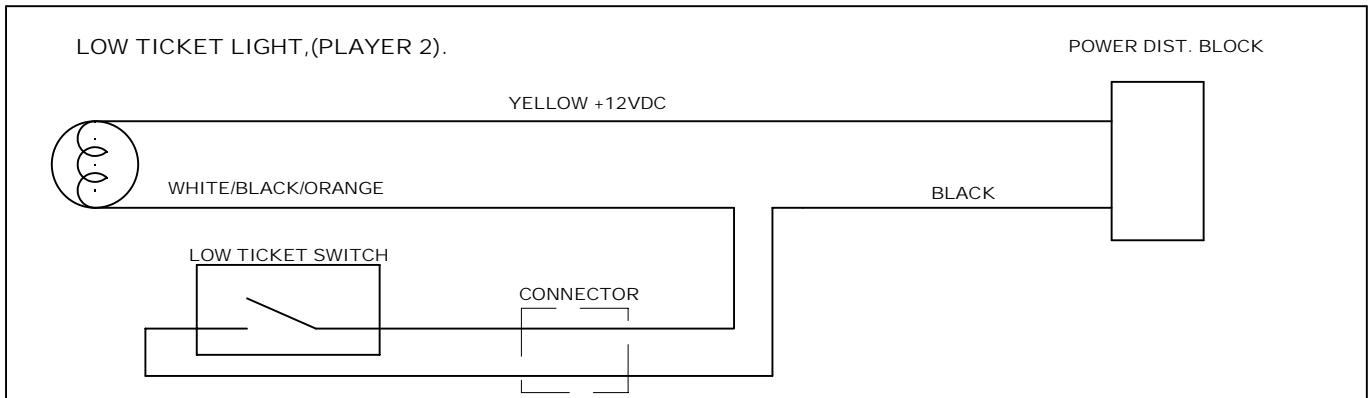
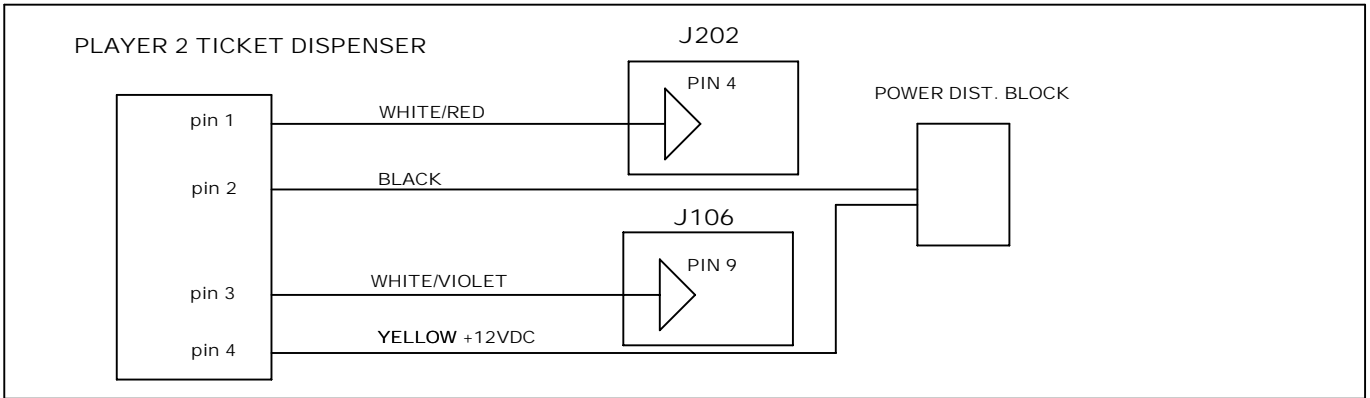
SPIRAL FLOURESCENT AND INCADESCENT
PLAYFIELD FLOOD LIGHTS

NOTE: REPLACE FLOURESCENT BULBS WITH ONLY 100
WATT EQUIVALENT SPIRAL FLOURESCENT BULBS.
NOTE: REPLACE INCANDESCENT BULB WITH
60 WATT FLOOD LIGHT ONLY.

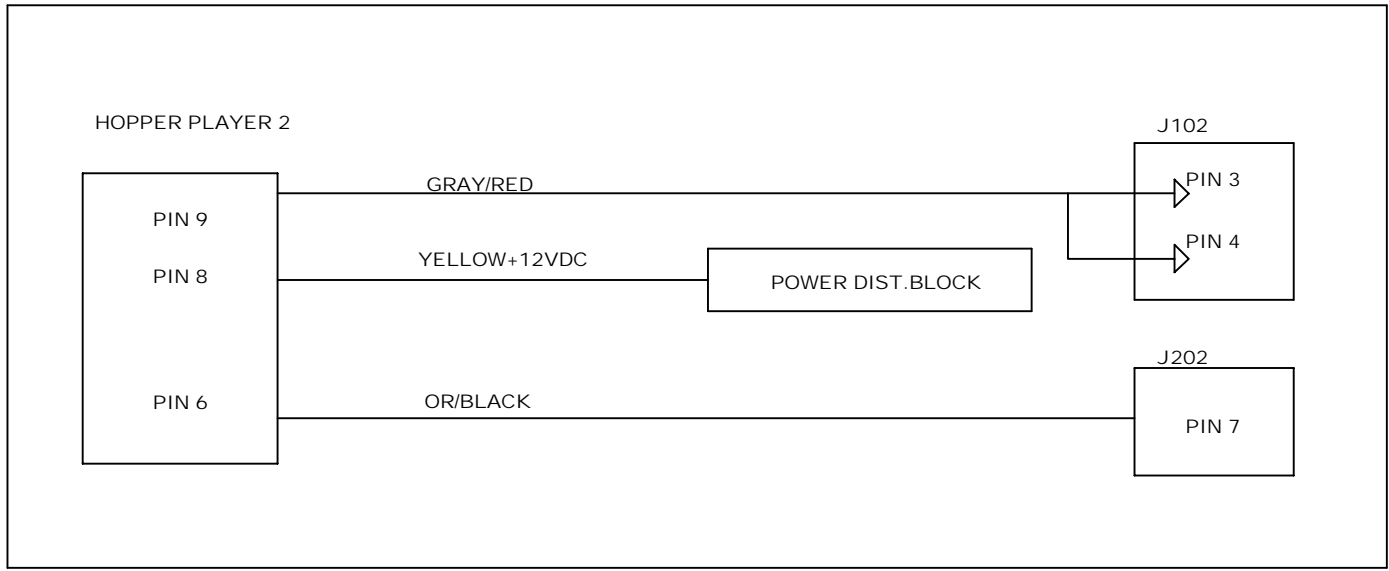
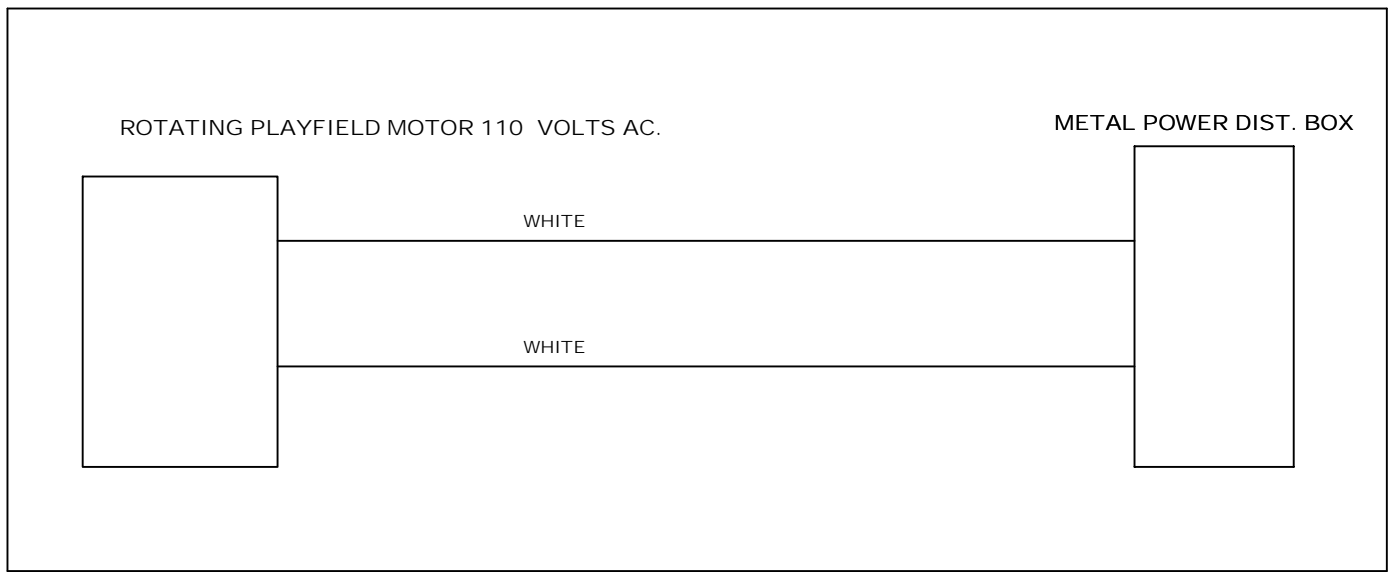


Schem-2

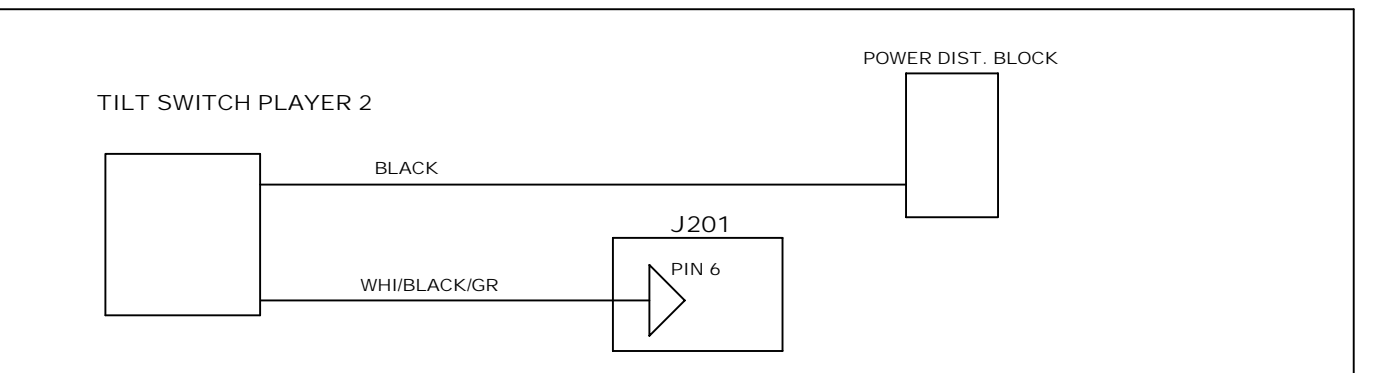
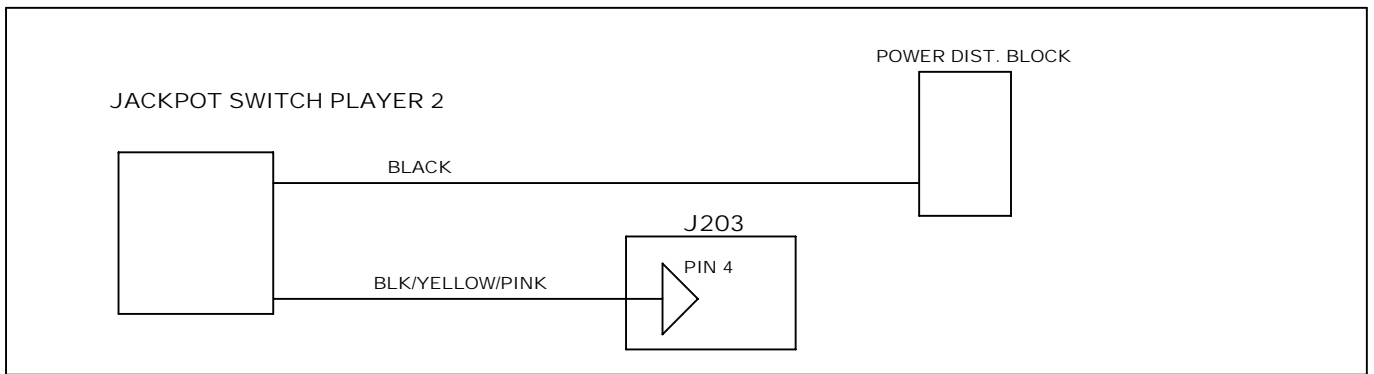
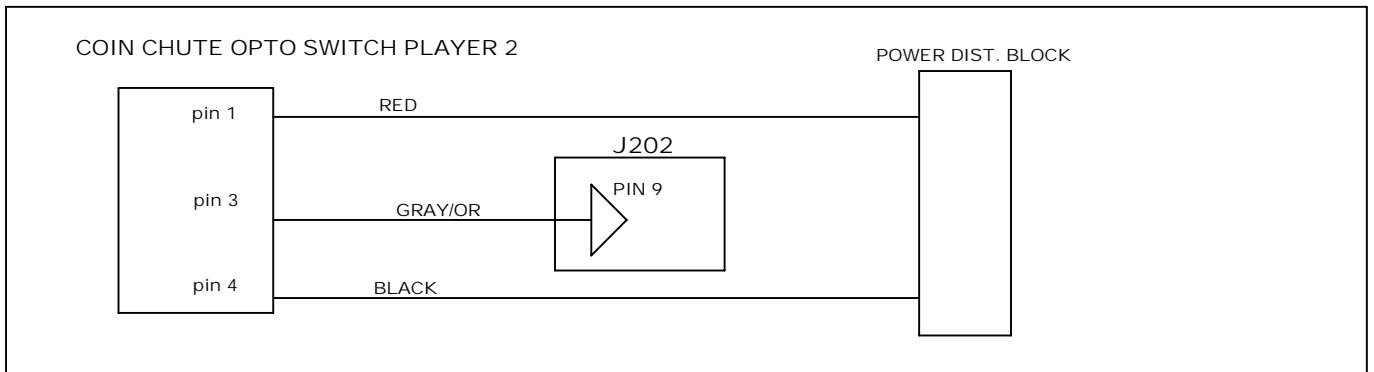
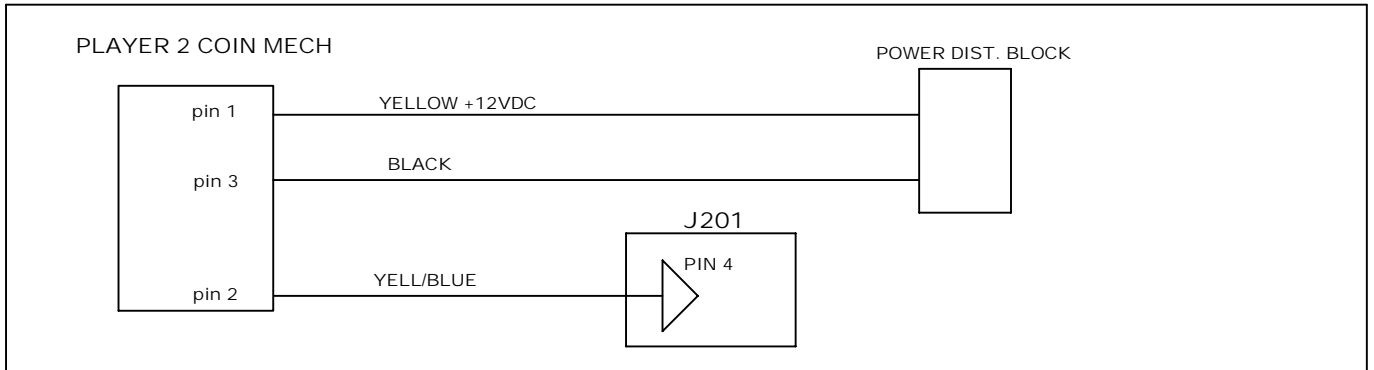
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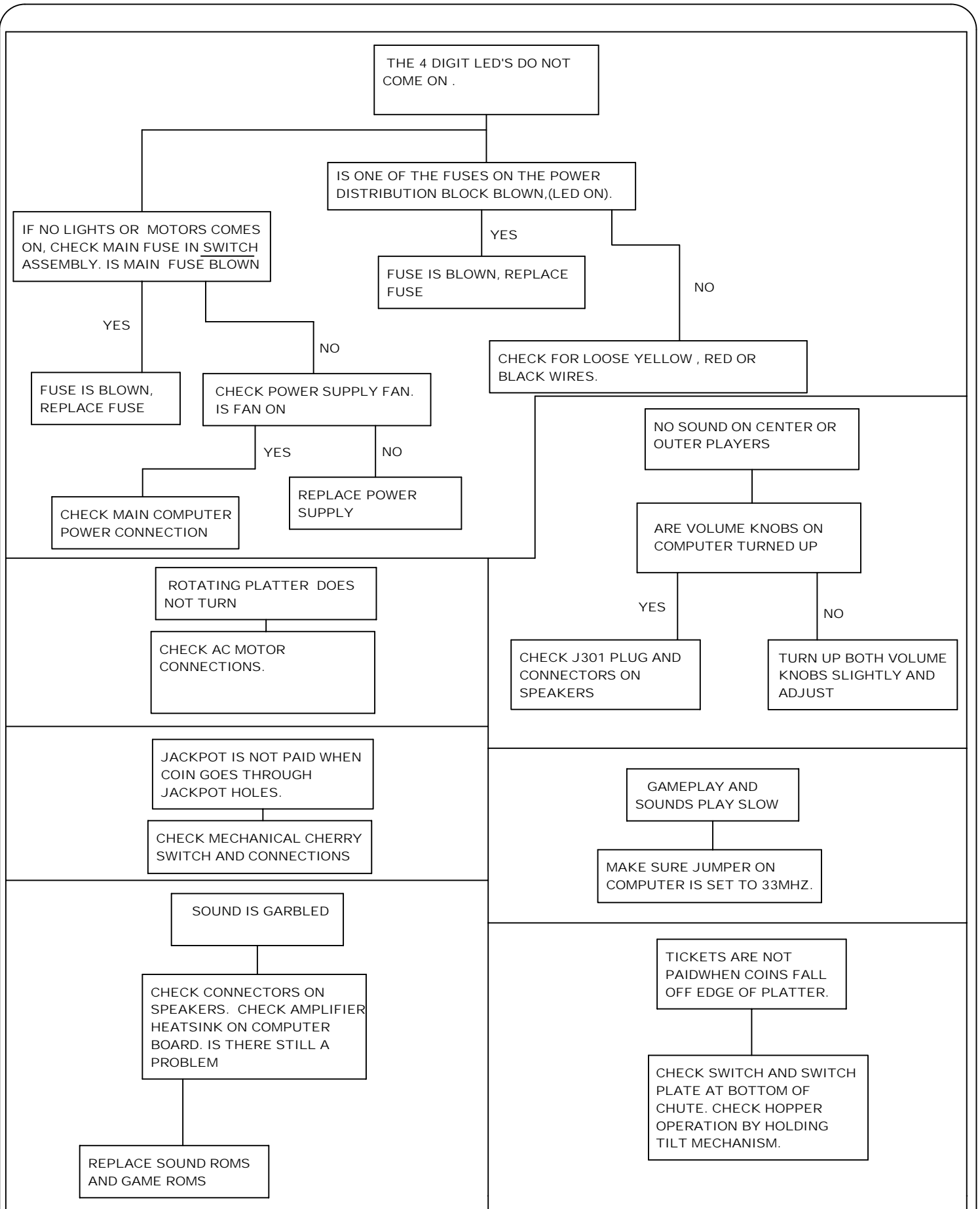
Schematic:



Schematic:



TROUBLESHOOTING GUIDE



TROUBLESHOOTING GUIDE CONT'D

