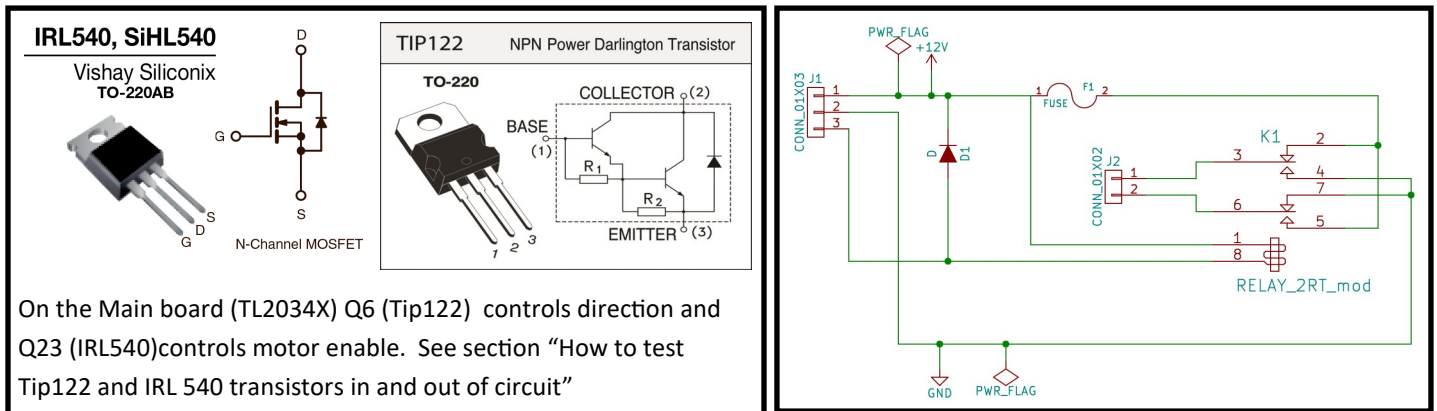
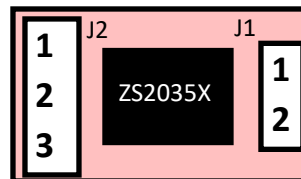


Playfield Movement (No error code will be generated at startup):

The Playfield motor is turned on through a relay and its direction of rotation is also controlled by the same relay. The motor is turned on by sending a ground signal from main board at J15, pin 2 to the relay J1 connector, at pin 2. Also on J1 at pin 1 is +12 volts of DC power that is used to power the coil of the relay and provide the out power for the playfield motor. The direction of rotation is controlled by the polarity of the voltage. This is controlled by connector J22, pin 2 of the main board. When this signal goes low the relay will energize and change state. The normally open and normally closed switches will flip, reversing polarity.



- From Power supply +12 VDC from KF2011 -> Pink
- From TL2034X J22, pin 2 (enable) -> Yellow/brown
- From TL2034X J15, pin 2 (direction)-> Violet/gray



- Orange <- Motor out 2 +/-
- Black <- Motor out 1 +/-



We recommend the use of "Pledge" Furniture Polish on the playfield if the bean bags do not slide down easy.

Bean Bags should be cleaned with cold water and mild dish detergent. They should be air dried.

Step by Step to resolve Playfield Movement Issues:

No Movement:

Step 1: Use a voltage meter and measure between pin 1 of J1 on the relay board and ground on the either power supply. Is +12 VDC present at pin 1?

Yes, continue.

No, check the +12 VDC power supply for proper function, replace if necessary.

Step 2: Use a jumper wire and briefly connect pin 2 of J1 on the relay board to any ground on the power supply. Did the playfield spin a direction?

Yes, check the wire from Pin 2 of J1 to J15, pin 2 on the main board using the Ohm setting of your voltage meter. If reading less than a ohm, replace the main board (TL2034X). If open or high resistance, check the pins and repair if necessary. Other wise replace the harness.

No, check for 12 volts of DC on J2 of the relay board (the polarity doesn't matter).

If missing replace relay board (ZS2035X).

If present, measure harness to motor, check motor connection. Replace/repair as necessary. If voltage is present at motor and motor still doesn't rotate, replace motor.

Note: direction change occurs at 7, 14, and 21 seconds of the game as long as game time is at 22. Altering game time will also change how many times the game will change direction.

No Reverse Direction:

Step 1: Using a voltage meter measure the voltage present at pin 3 of J1 on the relay board. Use the power supply ground for your DC ground. Leave the probes on to monitor the voltage at pin 3 during a game. Voltage should be present while the playfield rotates in one direction and drop to 0v the other direction. This will occur depending on how many times the game changes direction. Voltage present one way and not the other?

Yes, but the playfield rotated in only one direction, replace ZS2035X relay board.

No, check wiring from J1, pin3 to J15, pin 2 of the main board. Measure the ohms.

If 1 Ohm or less and pins of the connectors are good, replace TL2034X main.

If open or more than a ohm, repair wiring or replace harness. Retest.