

52041

- SKY BLAZER -

We suggest to the mechanic that he carefully study the below mentioned operations before making any attempt to adjust or repair the machine.

The mechanic must know that wherever a contact switch is mentioned to be checked, this switch should be cleaned with a point (contact) file, and unless otherwise specified, the contact gap should be about $3/64$ " when open, and when closed, should make with as much rub or follow thru as possible to insure a good contact.

Before checking for any difficulties, check the following:

1. Lead-in cord to wall outlet.
2. Jack Plugs to match with female plugs and fit tightly.
3. Fuses for proper amperes and burn-outs.
4. Contacts on tilt coil and lock coil relays.
5. Clock contact located under playfield.

Solenoid armatures should be lubricated with genuine "Gulf" Graphite Penetrating Oil occasionally.

I. Numbered Bumpers (1 to 12)

These bumpers, when hit, score 1000's and trip their respective relays in the Trip Relay Bank.

The sequence of operation works as follows:

1. The "100 Bumper Intermediate Relay" and the respective Trip Relay, being wired in series, energize together.
2. The "1000 Bumper Intermediate Relay" when energized, completes the circuit to the "1000 Gravity Delayed Relay", which, in turn, closes the circuit to the 1000 Step-Up Drive Coil and thus scores 1000's.
3. The respective Trip Relay, when tripped, opens the circuit to the bumper lite and completes the circuit to the back panel lite thru the three-leaf switch. The two-leaf switch forms a part of the continuity to the (1-12) 5 Replay Relay.

If any of the above fail to operate when the bumper is hit, check:

1. All forementioned switches for proper adjustments.
2. Solder connections to the bumpers and the "1000 Bumper Intermediate Relay".
3. Fine braided wire soldered to the pin of the bumper.

4. Possible 'open' in either the "1000 Bumper Intermediate Relay" or respective Trip Relay.

II. When all the bumpers are hit, the player is awarded 5 Replays which are attained in the following order:

1. The continuity of the two-leaf switches on the #1 to #12 Trip Relays inclusive, plus the "5 Replay Holdover Switch" located on the "Scoring Motor Unit", energizes the (1-12) 5 Replay Relay.
2. The inner two-leaf switch on this relay energizes the "5 Replay Relay" which in turn records 5 replays. See Section VIII.
3. The outer two-leaf switch on the (1-12) 5 Replay Relay energizes the (1-12) Trip Relay which in turn breaks the circuit to the (1-12) 5 Replay Relay thru the two-leaf switch.

If any difficulty is obtained with the 5 Replays not scoring when all bumpers are put out, check:

- a. 1, 2, and 3 in Section II.
- b. The "Relay Control Switch" on the "Scoring Motor Unit".
- c. The holding switch on the "5 Replay Relay".
- d. See instructions tacked to the inside of the back cabinet under the heading of Scoring Motor Unit.

III. #12 Bumper

This bumper will score 1000's and trip its respective Trip Relay until either the #1 to #3 bumpers are hit or a score of 50,000 is reached.

1. When the #1 to #3 bumpers are hit, the lite to the left of the bumper comes on and hitting #12 will give the player 5000. This lite is made by the inner two-leaf 'make switch' on (1-3) Trip Relay.
2. When a score of 50,000 is made, the lite to the right of #12 comes on. Hitting #12 now will give the player one Replay. The lite is 'made' by inner contact of the inner three-leaf switch on the "50,000 Trip Relay".

If any of the above fails to function properly, check:

- a. The switch on the "#12 Bumper Relay".
- b. The outer three-leaf switch on the "50,000 Trip Relay".

- c. The three-leaf switch on the (1-3) Trip Relay.
- d. See Section VIII.
- e. Solder connections on all switches mentioned.
- f. The "50,000 Trip Relay" solder connections.
(This relay is controlled by the 1000 Step-Up Unit.)

IV. Rollovers.

1. Top Rollover (Winnie Mae.)

- a. This rollover registers 5000 when not lit and also trips its respective Trip Relay.
- b. When lit; that is, when #1 to #6 bumpers inclusive are hit, this rollover will register 5 Replays. See Section VIII.
- c. a and b above are governed by the three-leaf switches located on the "Top Rollover Trip Relay" and the "1-6 Trip Relay".

2. Middle Rollover (Sky Chief).

- a. This rollover registers 5000 when not lit and also trips its respective Trip Relay.
- b. When lit, that is, when #1 to #8 bumpers inclusive are hit, this rollover will register 5 Replays. See Section VIII.
- c. a and b above are governed by the three-leaf switches located on the "Middle Rollover Trip Relay" and the "1-8 Trip Relay".

3. Side Rollovers (Sun God and Spirit of St. Louis).

- a. These rollovers register 5000 when not lit and also trip their respective Trip Relays.
- b. When lit, that is, when #1 to #10 bumpers are hit, these rollovers will register 5 Replays. See Section VIII.
- c. a and b above are governed by the three-leaf switches located on the "Left Side Rollover Trip Relay", "Right Side Trip Relay" and the "1-10" Trip Relay".

- 4. Lite to Winnie Mae in back glass is completed thru switch on the "Top Rollover Trip Relay".

Lite to Sky Chief in back glass thru switch on the "Middle Rollover Trip Relay".

Lite to Sun God, thru switch on "Left Rollover Trip Relay".

Lite to Spirit of St. Louis thru switch on "Right Rollover Trip Relay".

Extra Special lite under Top Rollover is completed by switch on the "1-6 Trip Relay".

Lite under Middle Rollover by switch on "1-8 Trip Relay".

Lites under Left and Right Rollovers by switch on "1-10 Trip Relay".

V. - J.P.

To achieve a J.P., one must go thru all four rollovers, whether lit or not. Each rollover trips its respective Trip Relay and with all the Four Rollover Trip Relays tripped, a J.P. is attained.

If any difficulty is encountered in obtaining a J.P., check:

1. The outer contacts of three-leaf switches on the "Rollover Trip Relays".
2. The "Extra Special Award Switch" located on the "Replay Step-Up Unit". This switch should make with sufficient 'rub' or 'follow thru' and should break at 75.
3. The inner two-leaf make switches on the "Rollover trip Relays".
4. See Section VIII.

VI. 1000 Step-Up Unit. (Four fingered wiper switch.)

This unit controls the following:

- (a) 1000 lites (center row of buttons).
- (b) 10,000 lites (brass segments).
- (c) Replays thru outside row of buttons, plug adjustment and the switch on side of the unit.

VII. Replay Step-Up Unit.

This unit controls the following:

- (a) Replay lites thru outside row of buttons and the segments.

- (b) Extra Special Award thru switch that opens at 75.
- (c) Replay Coin Chute Coil. This coil, located directly under the coin chute, will energize when slot is pushed in providing there are replays showing in back cabinet. With replays up, the Open-at-Zero Switch on Replay Unit is closed and completes circuit to coin chute coil thru the Replay - Regular Jack, the three-leaf switch on Replay Reset Relay and the three-leaf switch on the coin chute door.

Note: The Open-at-Zero Switch is of no consequence if game is operated in Regular.

VIII. 5000 - 5 Replays - Replay Reset Relay.

These relays, when energized, close three switches which complete circuits to the following:

1. To the respective relay coil.
2. To the 1000 Gravity Delayed Relay if 5000 Relay is energized. To Replay Gravity Delayed Relay if 5 Replay Relay is energized. To the Replay Reset Coil when the Replay Reset Relay is energized. The 1000 and Replay Gravity Delayed Relays, and Replay Reset Coil are operated by the Impulse Switch on Motor Scoring Unit.
3. To Motor Coil of "Motor Scoring Unit".

Note: Read carefully the instructions in regard to Motor Scoring Unit tacked to side of back cabinet.

Meter.

When replays are counted off by means of a button under cabinet, meter will record as many times as replays shown in back cabinet. This operation works only when game is used as replay.

If meter fails to operate, check: (1) Reset Switch; (2) Plug in Replay position; (3) Two-leaf switch on Replay Reset Relay.

If game is used as Regular, Meter registers with every replay during play. Plug must be in Regular position. See complete instructions on card tacked to side of back cabinet.

Henry Dabek, Chief Inspector
The Exhibit Supply Company