SERVICE BULLETIN
GOR GAR SPECIAL ADJUSTMENTS
WIRING CHANGE FOR GOR GAR AND CERTAIN OTHER GAMES

This service bulletin provides special adjustment procedures for GOR GAR games that intermittently blow the 2.5A solenoid fuse and recommends wiring changes that should be made on GOR GAR. Wiring changes are also recommended for FLASH, STELLAR WARS, and early FIREPOWER games.

GOR GAR SPECIAL ADJUSTMENTS

Magnet switch contact bounce or repeated activation of the switch by the ball can cause the 2.5A solenoid fuse to blow. The gapping and adjustment of the magnet switch is critical to alleviate this possibility.

1. Contacts should be adjusted for approximately 1/8" gap and 1/16" followthrough.

2. The outside backup blade for the shorter blade should be adjusted to produce a slight pressure against it.

3. The inside backup blade for the shorter blade should be adjusted parallel to and just barely in contact with it.

WIRING CHANGE

A common ground on the playfield is used for special solenoid switches and for "Flash" lamp circuits. On Gorgar, the ground is also switched to the magnet coil. The source of this ground is from 3P3-3 on the Power Supply Board. If this ground lead should open, erratic operation of the special solenoids will result because of voltages on the "Flash" lamp and magnet circuits. On later FIREPOWER games, a separate ground is provided for the "Flash" lamp circuit from capacitor 6Cl in the backbox.

GOR GAR

The problem is most serious on early GOR GAR games with a 22-gauge black wire connected to 3P3-3. Inspect this wire. If it is smaller than the red wires at the same connector, remove the black lead from the connector and solder it to the negative (-) terminal of capacitor 6Cl (terminal with black lead attached.) For added protection, the black leads on the magnet relay contacts and the "Flash" (magnet) lamp circuit should be isolated from the special solenoid switches. Proceed as follows:

1. Remove and separate the two black leads connected to the contacts of the magnet relay.
2. Using a meter, determine which lead is connected to the terminal strip associated with the magnet lamps. Reconnect this lead to the relay contact.

3. Cut the other lead back to the harness and insulate with electric tape.

4. Obtain approximately 36 inches of 18 gauge black wire and terminate one end with a spade lug.

5. Solder the other end of this wire to the terminal with the black lead on the magnet lamp terminal strip.

6. Connect the spade lug under the wing nut in the backbox with the ground braid from the cabinet.

"FIREPOWER and " STELLAR WARS"

Additional protection for "FLASH" and " STELLAR WARS" games can be provided by isolating the special solenoid switch ground from the ground for the "Flash" lamp circuit. Lengths of approximately 84" of 18 gauge black wire are required. Proceed as follows:

1. Unsolder the black lead(s) from the "Flash" lamp terminal strip and reconnect to the unused terminal on the terminal strip. (Two leads are connected on "FLASH" games and one lead is connected in " STELLAR WARS".)

2. Connect one end of the 18 gauge black wire to the terminal from which the lead(s) was removed in step 1.

3. Route the wire through the playfield cable harness for connection in the backbox.

4. Terminate the other end of the wire with a spade lug and connect it under the wing nut in the backbox with the ground braid from the cabinet.

"FIREPOWER" Test Games

Additional protection can be provided for "FIREPOWER" test games by isolating the special solenoid switch ground from the "Flash" lamp circuit. The test games can be identified by inspecting the 6P2/6J2 connector in the backbox. On test games 6P2/6J2 are single pin connectors with a brown-violet wire. On production games 6P2/6J2 are 3-pin connectors with black and brown-violet wires. No changes are required on production games. To make wiring changes on test games obtain approximately 80 inches of 18 gauge black wire and proceed as follows:

1. Unsolder the black leads from the "Flash" lamp terminal strip and reconnect them to the unused terminal.

2. Connect one end of the 18 gauge black wire to the terminal from which the leads were removed in step 1.

3. Route the wire through the cable harness for connection in the backbox.

4. Terminate the other end of the wire with a spade lug and connect it under the wing nut in the backbox with the ground braid from the cabinet.