

# Inter Office Memo



Coin Operated Games Division

To: Field Service cc: M. Hally

From: \_\_\_\_\_

Subject: STAR WARS Service Notes Date: July 5, 1983

1. On REV A and REV B Main Boards make sure that R3 is 68 Ohms. It should be either a 68 Ohm resistor or a 220 Ohm resistor in parallel with a 100 Ohm resistor. (All resistors are 1/4 Watt, 5%, Carbon Film.) On REV C Main Boards the circuit involving 3F and 3D has been changed to make it less sensitive to values of R3.
2. In positions 5F and 5H on the Main Board, do not use RAMs from Advanced Micro Devices (AMD). The parts would be labeled AM9128-15 or AM9128-10. The symptoms are that Self-Test runs ok, indicating that the RAMs are good; even the Matrix Processor tests run ok. Yet the 3D objects in the game (the stars, the TIE fighters, and the towers) become distorted. Parts from Synertek (SY2128) are ok; parts from other manufacturers will probably work, too.
3. Schematic error - 6E(2) should be shown going to 5E(6).  
6E(1) should be shown going to IP7.
4. Switch 8 on the Option Switch located at 10 E/F puts the game into a freeze frame mode which can be advanced frame-by-frame by pressing the Left Trigger. There are some sections of the game that use an extra high brightness level in order to achieve a special effect such as the Death Star explosion.

During normal game play these effects last only a short time and there is no danger of harming the picture tube or the monitor electronics. However, if you use Freeze Frame during these times for an extended period you may damage the picture tube by burning a hole in it.

## X-Y DISPLAY

5. The over-voltage pot (R17) should be set fully counter-clockwise. This sets the H.V. over-voltage trip to between 25 KV and 30 KV. The first run (a few hundred games) were set at 21.5 KV, causing the display to switch off intermittently.
6. If brightness needs adjustment, make sure the game has had at least 20 minutes to warm up.
7. If servicing the high voltage board, replace capacitors C3 and C4 (100uF, 35v) with 220uF, 35v, low ESR capacitors ( ATARI P/N 123009-227). (There are none of these caps in house yet as of 7/1/83. PMcC)

Remember, the Force will be with you. Always.