TAITO AMERICA CORPORATION

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August 7, 1981

To: All Taito America Distributors

Subject: Moon Shuttle

Field tests on Moon Shuttle indicate that while the game is getting good play, the length of play per quarter is becoming unacceptable at some locations.

In line with our continuing policy of providing the best service possible, we are today rushing new roms to cover Moon Shuttle games already delivered to your facility.

The effect of these new roms is to increase the difficulty from the first frame and make the game increasingly difficult as the player continues.

We strongly urge that you immediately make these roms available to your operators in possession of Moon Shuttle.

The new rom will, of course, be in our production run.

We believe that this rom change will not only heighten player enjoyment, but will also boost earnings significantly.

☐ MANDATORY

☑ ON FAILURE ONLY

☐ FOR YOUR INFORMATION

81-7

ATTN: SERVICE MANAGERS

GAME: MOON SHUTTLE

SUBJECT: MISSING SOUND, CONSTANT TONE OR SOUND DISTORTED.
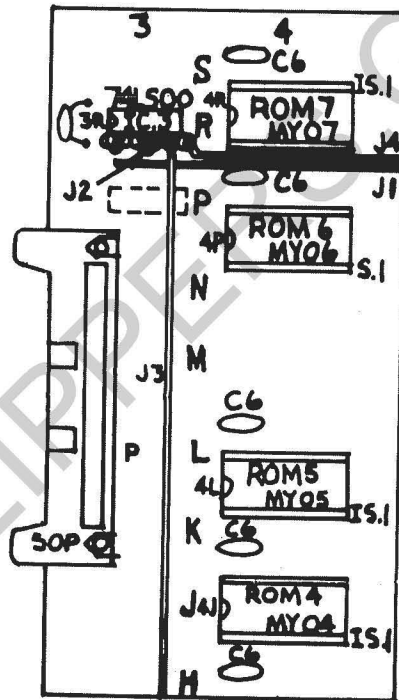   MOSTLY A HEAT PROBLEM.

SOLUTION: ADD A CAPACITOR TO FILTER OUT NOISE ON +5V ETCH

PARTS NEEDED: ONE 0.1uf CAPACITOR

DISPOSITION OF OLD PARTS: NONE

PROCEDURE: ADD 0.1uf FILTER CAPACITOR AT LOCATION 3R AS SHOWN IN
FIGURE 1. MAKE SURE YOUR HAVE AT LEAST 4.9V ON THE 5V
BUS LINE ON TOP BOARD.

FIGURE 1

81-9

☐ MANDATORY
☐ ON FAILURE ONLY
☑ FOR YOUR INFORMATION

ATTN: SERVICE MANAGERS

GAME: MOONSHUTTLE

SUBJECT: SELF TEST

SOLUTION: USES A JUMPER WIRE TO ENABLE SELF TEST

PARTS NEEDED: NONE

DISPOSITION OF OLD PARTS: NONE

PROCEDURE: TURN OFF THE GAME. PLACE A JUMPER WIRE BETWEEN PIN 19 AND PIN 40 ON THE G CONNECTOR. TURN ON THE GAME.

THE FIRST TEST EXECUTED WILL BE ON THE ROM TEST. IT ONLY TESTS ROM 1 TO 5 ON FAILURE, REFER TO TABLE 1.

TABLE 1.

DISPLAYED ON CRT	REPLACE
ROM 1 NG	ROM 1
ROM 3 NG	ROM 3
ROM 4 NG	ROM 4
ROM 5 NG	ROM 2
GARBAGE ON SCREEN	ROM 5

THE SECOND TEST EXECUTED WILL BE THE RAM TEST. ALL RAM CHIPS ARE ON THE GAME BOARD. THIS TESTS ONLY THE FOUR RAMS AT 3F, 3H, 4F, AND 5F ON FAILURE, THE CHIP LOCATION WILL BE DISPLAYED E1.

RAM   3F   NG

BE CAREFUL! IF ANOTHER ASSOCIATED CHIP ON THE ADDRESS LINE WILL GIVE THE SAME DISPLAY.

IF THE GAME PASSES THESE TESTS, THE DISPLAY WILL LOOK LIKE THIS.

ROM   OK
RAM   OK

NEXT, THE CRT WILL DISPLAY THE OPTIONS VIA THE SWITCH SETTINGS. IT WILL ALSO DISPLAY:

SOUND   NO:
SWITCH:

THE GAME WILL GO THROUGH ALL THE SOUNDS BY NUMBERS. YOU WILL FIND THE SOUND NUMBERS IN TABLE 2.

CAUTION

DO NOT LET IT GO THROUGH FOUR (4) PASSES OF SOUND OR THE SOUND CHIP MAY GET OVERHEATED AND NOT PRODUCE ANY SOUNDS AT ALL.

TABLE 2.

SOUND NUMBER	SOUND
1	STARTING SOUND
2	JELLY WALK
3	BIG PLASMA JACK MOVEMENT
4	SELECTION MOVEMENT
5	EXPANDO MOVEMENT
6	END OF FRAME
10	FIRE AND COIN
11	E J EXPLOTION
12	PLASMA JACK HIT
13	
14	LITTLE PLASMA JACK, HIT
15	RETON HIT
16	CENTRON HIT
17	METEOR HIT
18	END OF METEOR BONUS
19	GOOD WORK
1A	NEVER GIVE UP
1B	HITTING HIDDEN METEOR ROCKET
1C	CENTRON EXPLODING
1D	RETON FIRE
1E	EXPANDO FIRE
1F	JELLY FIRE
20	EXPLODING

THE SWITCH NUMBERS WILL BE DISPLAYED WHEN THE SWITCH IS MADE. THE NUMBER ASSOCIATED TO THE SWITCH IS IN TABLE 3.

TABLE 3.

DESCRIPTION	DISPLAYED
RIGHT COIN SWITCH	C2
LEFT COIN SWITCH	C2
SERVICE SWITCH	C2
JOYSTICK UP	U1
JOYSTICK DOWN	D1
JOYSTICK RIGHT	R1
ONE PLAYER	1P
TWO PLAYER	2P
FIRE	F1

IF SOUND NUMBER 14, 19, 1A, OR 1E IS MISSING, REPLACE ROM 6.

IF SOUND NUMBER 10, 1F, OR 20 IS MISSING, REPLACE ROM 7.

IF THE BACKGROUND IS ALL WHITE, REPLACE ROM 8.

IF THE BACKGROUND IS ALL YELLOW, CHECK EITHER ROM 9 OR RAM CHIP AT LOCATION 1P.

IF BACKGROUND IS ALL BLUE, CHECK RAM CHIP AT LOCATION 1N.

IF THE ROCKET TURNS YELLOW*, CHECK RAM CHIP AT LOCATION 1R.

IF THE ROCKET TURNS RED*, CHECK RAM CHIP AT LOCATION 1S.

IF THE ROCKET TURNS GREEN*, CHECK RAM CHIP AT LOCATION 1T.

IF WHEN THE ROCKETS OR THE CENTRON EXPLODE AND YOU SEE JUST A BLOCK OF COLOR, CHECK ROM 10 OR ROM 11.

*THESE ARE TINTED COLORS OF THE ROCKETS NOT ENTIRE COLOR.

81-11

☐ MANDATORY

☑ ON FAILURE ONLY

☐ FOR YOUR INFORMATION

ATTN: SERVICE MANAGERS

GAME: MOONSHUTTLE

SUBJECT: SWITCH SETTING FOR SWITCH 4 & 5 DOES NOT WORK FOR COIN
SELECTION FOR SOME MACHINES.

SOLUTION: REWIRE G CONNECTOR

PARTS NEEDED: NONE

DISPOSITION OF OLD PARTS: NONE

PROCEDURE: SWITH THE WIRE ON THE G CONNECTOR, PIN 1 ON TO PIN 2.