

TAXITM

Preliminary OPERATIONS MANUAL including Essential Tables, Charts, & Matrixes

*Use the accompanying manual as a
reference for schematics and other
wiring diagrams, if necessary.
For TAXI, the schematics are similar
enough to show the basic principles of
operation for most circuits/devices.*

**Return the lower portion of the letter to obtain
your printed manual, when it becomes available.**

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FOREWORD

This brief manual is provided for your information in advance of the regular manual, which is currently in development. This manual contains the tables showing the essential audit, adjustment, and troubleshooting factors, and is intended for use by those persons familiar with the game program and mechanisms usually appearing in Williams Electronics Games products.

Return the lower portion of the letter accompanying this game to obtain your manual, after its completion. Mention on the Game Registration Card that the manual did not accompany the game.

WILLIAMS ELECTRONICS GAMES, INC.
CUSTOMER SERVICE DEPARTMENT-

PUBLICATIONS GROUP

TAXI Audit Table

Audit Item (Player 3)	Descriptive Phrases (Player 1 and 2 Displays)	Audit Factor ¹ Value (Player 4)
AU 01	LEFT COINS [chute next to coin door hinge]	432
02	CENTER COINS	0
03	RIGHT COINS	398
04	PAID CREDITS	830
05	TOTAL PLAYS	
06	TOTAL FREE (Total Free Plays)	
07	PERCENT FREE (% Free Plays)	
08	REPLAY AWARDS	
09	PERCENT REPLAY (% Replay Awards)	
10	SPECIAL AWARDS	
11	PERCENT SPECIAL (% Special Awards)	
12	MATCH AWARDS	
13	HSTD (High Score to Date) CREDITS	
14	PERCENT HSTD (% HSTD Credits)	
15	EXTRA BALLS	
16	PERCENT EX. BALL (% Extra Balls)	
17	AV. BALL TIME (Average Time in Seconds)	
18	MIN. OF PLAY (Minutes of Play)	
19	BALLS PLAYED	
20	REPLAY1 AWARDS	
21	REPLAY2 AWARDS	
22	REPLAY3 AWARDS	
23	REPLAY4 AWARDS	
24	1 PLAYR. GAMES	
25	2 PLAYR. GAMES	
26	3 PLAYR. GAMES	
27	4 PLAYR. GAMES	
28	BURN IN CYCLES	
29	LEFT OUTLANE (# of times ball drained via left outlane)	
30	RIGHT OUTLANE (# of times ball drained via right outlane)	
31	MILLION SHOTS (# of MILLION shots)	
32	JACKPOT SHOTS (# of JACKPOT shots)	
33	MULTI- BALLS (# of times Multi-Ball™ was obtained)	
34	E. B. VIA CATAPULT (# of Ex. Ball awards via Catapult shot)	
35	SPINOUT 100K (# of 100K shots at Spinout)	
36	JACKPOT / MILLION GAMES (# of Jackpots/Million Games)	
37	TIME LOCKS (# of times Time Lock occurred)	
38	JOY RIDES (# of JOYRIDE awards)	
39	H.S.RESET COUNTER	
40	0.0-0.4 M. SCORE (# of games <500K)	
41	0.5-0.9 M. SCORE (# of games ≥500K, <1M)	
42	1.0-1.4 M. SCORE (# of games ≥1M, <1.5M)	
43	1.5-1.9 M. SCORE (# of games ≥1.5M, <2.0M)	
44	2.0-2.9 M. SCORE (# of games ≥2.0M, <2.9M)	
45	3.0-3.9 M. SCORE (# of games ≥3.0M, <3.9M)	
46	4.0-4.9 M. SCORE (# of games ≥4.0M, <4.9M)	
47	5.0-5.9 M. SCORE (# of games ≥5.0M, <5.9M)	
48	6.0-6.9 M. SCORE (# of games ≥6.0M, <6.9M)	
49	7.0-7.9 M. SCORE (# of games ≥7.0M, <9.9M)	
NOTE: 1. The numbers shown in this column for Items 1 through 4 are examples. Entries for all items depend on the amount of play; thus, they will vary from location to location.		

TAXI Game Adjustment Table

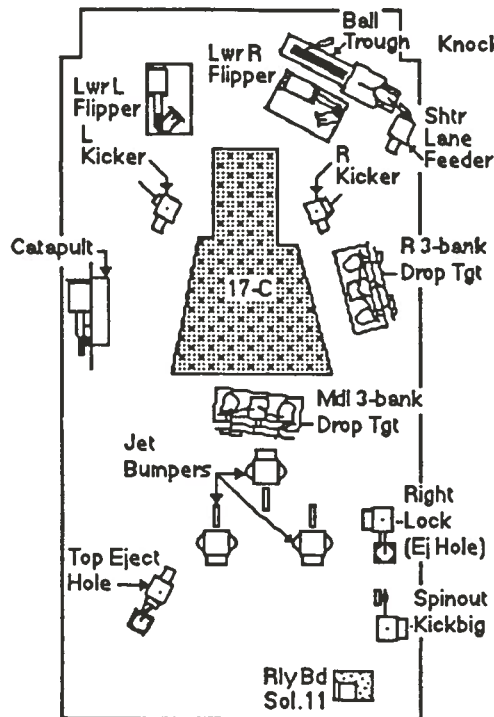
Adjustment Item (Player 3)	Descriptive Phrases (Player 1 and 2 Displays)	Factory Setting (Player 4)
Ad 01	AUTO REPLAY ¹ or FIXED REPLAY ¹	10 (%)
02	REPLAY START (or REPLAY LEVEL 1) ¹	SCORES ¹
03	REPLAY LEVELS (or REPLAY LEVEL 2) ¹	2,000,000
04	(REPLAY LEVEL 3) ¹	01 (or OFF)
05	(REPLAY LEVEL 4) ¹	(see text)
06	REPLAY AWARD	(see text)
07	SPECIAL AWARD	Credit
08	MATCH FEATURE	Credit
09	BALLS / GAME	10 (%)
10	TILT WARNING	03
11	EX. BALL / B. I. P.	03
12	MAXIMUM CREDITS	{ [00 = NO Ex. Ball; 1-9 E. B. /Ball; 1-9 E. B. /B. I. P.; 1-9 E. B. /Game]}
13	HIGHEST SCORES	2/BIP
14	BACKUP HI. SCR. 1	10
15	BACKUP HI. SCR. 2	On
16	BACKUP HI. SCR. 3	5,000,000
17	BACKUP HI. SCR. 4	4,500,000
18	HI. SCR. 1 CREDITS	4,000,000
19	HI. SCR. 2 CREDITS	3,500,000
20	HI. SCR. 3 CREDITS	01
21	HI. SCR. 4 CREDITS	01
22	H. S. RESET EVERY	01
23	FREE PLAY	01
24	U.S.A. 1 COINAGE (1 COIN 1 PLAY) ^{2,3,6}	3,000
25	LEFT UNITS	NO
26	CENTER UNITS	01
27	RIGHT UNITS	04
28	UNITS/ CREDIT	01
29	UNITS/ BONUS	01
30	MINIMUM UNITS	00
31 - 48	Game-specific Adjustments (detailed in text and the Game Adjustment Setting Comparison Table)	00
49 ⁴	CUSTOM MESSAGE	ON
50	SW. ALARM KNOCKER [yes=knock for inop switch; no=no knock]	NO
51-52	UNUSED ADJUST	
53 -58 ^{5,6}	Special Pricing Adjustments- See text for 53-58 details.	
59 ⁵	INSTALL ADDABALL	NO
60 ⁵	INSTALL 5-BALL	NO
61 ⁵	INSTALL NOVELTY	NO
62 ⁵	INSTALL EX. EASY	NO
63 ⁵	INSTALL EASY	NO
64 ⁵	INSTALL MEDIUM	NO
65 ⁵	INSTALL HARD	NO
66 ⁵	INSTALL EX. HARD	NO
67	AUTO BURN-IN	NO
68	CLEAR COINS	NO
69 ⁷	CLEAR AUDITS	NO
70 ⁷	INSTALL FACTORY	NO

NOTES:

1. Automatic Replay percentage value range is adjustable from 5 to 50%, via the Credit button. Item 02 permits changing the factory setting value for Replay Start Level (valid for next 500 games played). Item 03 permits setting up to four replay levels, with values as detailed in text describing item 03. For Fixed Replay Scores, set Auto Replay value to 1 less than 5(%) via the Credit button. Go to items 02, 03, 04, and 05; install their replay level scores. Turn off any replay level by setting 00 as its value.
2. Phrase in parentheses is Factory Setting. Phrase appears in player 2 and 4 displays. Press Credit button to change setting of the game pricing of item 24.
3. To change country OR coinage setting, press Credit button to obtain 16 Standard settings, followed by a Custom Setting. The Custom Setting activates items 25 through 30. When a Standard Setting is used, items 25 through 30 are set automatically, and cannot be changed.
4. To install Custom Message, press flipper button for alphabet and special characters. Press Credit button for next message letter or character.
5. Special Preset Adjustment, whose effects are noted in the Game Adjustment text.
6. Refer to Pricing Table and text describing these items.
7. Approximates Ad 64, yet includes all factors listed in Factory Setting column, not just Ad 31 through 47 provided by Ad 64.

TAXI Game Adjustment Setting Comparison Table

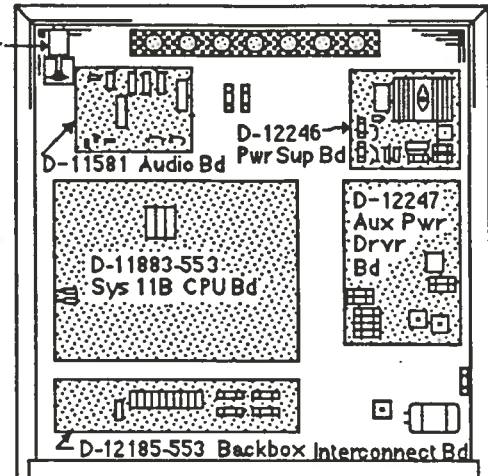
Adj #	Adj Description	Extra Easy	Ad 62	Easy	Ad 63	Medium (Factory)	Ad 64	Hard	Ad 65	Extra Hard	Ad 66
31	C-A-B Ex. Ball	2		3		4		6		7	
32	Raise JACKPOT Time	10 sec		10 sec		10 sec		7 sec		5 sec	
33	JACKPOT Advance	10K		5K		2K		1K		1K	
34	JACKPOT Difficulty	1		3		4		5		6	
35	MILLION Difficulty	1		1		2		3		5	
36	EXPRESS LANE Diff	1		1		1		2		3	
37	JACKPOT Minimum	1 Million		1 Million		500K		500K		500K	
38	JACKPOT Maximum	4 Million		4 Million		4 Million		3 Million		3 Million	
39	JACKPOT Timer	20 sec		20 sec		15 sec		10 sec		10 sec	
40	Ex. Ball Auto Adj	33%		33%		33%		20%		10%	
41	SPECIAL Auto Adj	5%		5%		4%		2%		2%	
42	Marilyn Timer	25 sec		20 sec		10 sec		8 sec		5 sec	
43	Pin-Bot Timer	30 sec		25 sec		15 sec		10 sec		8 sec	



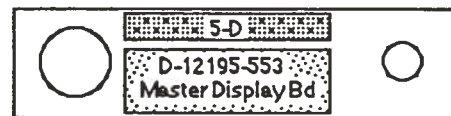
Underside of Playfield
Viewed in Raised Position

LOCATIONS

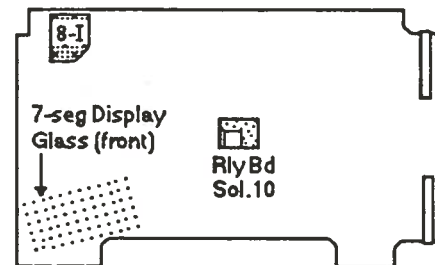
-  Circuit Boards
-  Lamp Boards
-  Major Mechanisms



Backbox



Display - Speaker Panel



Inside of Insert Board
Viewed in Open Position

TAXI Solenoid Table

Sol. No.	Function	Solenoid Type	Wire Color	Connections		Driver Trnstr	Solenoid Part Number Flashlamp Type i=Insert Bd; p=Playfield; d=Dome	
				CPU Bd	Playfield/ Cabinet			
01A ³	Outhole Kicker	Switched	{Vio-Bm}	1P11-1	5J1-9: 5J4-9 (A)	Q33	AE-23-800	
01C ³	Pin-Bot Flasher	Switched	{Blk-Bm}	(Gry-Bm)	5J5-9 (C)	Q33	#89 flashlamps	1p,1i
02A ³	Ball Release (Shtr Lane Feeder)	Switched	{Vio-Red}	1P11-3	5J1-7: 5J4-8 (A)	Q25	AE-23-800	
02C ³	Dracula Flasher	Switched	{Blk-Red}	(Gry-Red)	5J5-8 (C)	Q25	#89 flashlamps	1p,1i
03A ³	Catapult	Switched	{Vio-Orn}	1P11-4	5J1-6: 5J4-7 (A)	Q32	AL-23-800	
03C ³	Marilyn Flasher	Switched	{Blk-Orn}	(Gry-Orn)	5J5-7(C)	Q32	#89 flashlamps	1p,1i
04A ³	Middle 3-bank Dr Tgt	Switched	{Vio- Yel}	1P11-5	5J1-5: 5J4-6 (A)	Q24	AE-26-1200	
04C ³	Santa Flasher	Switched	{Blk-Yel}	(Gry-Yel)	5J5-5 (C)	Q24	#89 flashlamps	1p,1i
05A ³	Top Eject Hole	Switched	{Vio-Gm}	1P11-6	5J1-4: 5J4-5 (A)	Q31	AE-23-800	
05C ³	Gorbie Flasher	Switched	{Blk-Gm}	(Gry-Gm)	5J5-4 (C)	Q31	#89 flashlamps	1p,1i
06A ³	Right 3-bank Dr Tgt	Switched	{Vio-Blu}	1P11-7	5J1-3: 5J4-4 (A)	Q23	AE-26-1200	
06C ³	Left Ramp Flasher	Switched	{Blk-Blu}	(Gry-Blu)	5J5-3 (C)	Q23	#89, #906 flashlamps	1p,1d
07A ³	Spinout Kickbig	Switched	{Vio-Blk}	1P11-8	5J1-2: 5J4-2 (A)	Q30	AE-26-1500	
07C ³	Right Ramp Flasher	Switched	{Blk-Vio}	(Gry-Vio)	5J5-2 (C)	Q30	#89 , #906 flashlamps	1p,1d
08A ³	Right Lock (Eject Hole)	Switched	{Vio-Gry}	1P11-9	5J1-1: 5J4-1 (A)	Q22	AE-26-1500	
08C ³	Spinout Flasher	Switched	{Blk-Gry}	(Gry-Blk)	5J5-1 (C)	Q22	#89 flashlamps	2p
09	Top Ball Gate	Controlled	Bm-Blk	1P12-1	5J2-9: 5J6-9: 2J4-3	Q17	SM1-35-4000-DC	
10	Insert Gen Illumin Relay	Controlled	Bm-Red	1P12-2	5J2-8: 5J6-8: 2J4-5	Q9	5580-12145-01 ⁴	
11	Playfield Gen Illum	Controlled	Bm-Orn	1P12-4	5J2-6: 5J6-7: 2J4-6	Q16	5580-12145-01 ⁴	
12	A/C Select Relay	Controlled	Bm-Yel	1P12-5	5J2-5	Q8	5580-09555-01 ⁵	
13	Bell	Controlled	Bm-Gm	1P12-6	5J2-4: 5J6-5	Q15	SM-26-600-DC	
14	Knocker	Controlled	Bm-Blu	1P12-7	5J2-4: 5J6-3	Q7	AE-26-1200	
15	JACKPOT Flasher	Controlled	Bm-Vio	1P12-8	5J2-2: 5J6-2	Q14	#89 flashlamp	1p,2i
16	JOYRIDE Flasher	Controlled	Bm-Gry	1P12-9	5J2-1: 5J6-1	Q6	#89 flashlamp	1p
17	Left Jet Bumper	Special #1	Blu-Brn	1P19-7	5J3-7: 5J7-7	Q75	AE-23-800	
18	Left Kicker ("sling")	Special #2	Blu-Red	1P19-4	5J3-6: 5J7-6	Q71	AE-26-1500	
19	Right Jet Bumper	Special #3	Blu-Orn	1P19-3	5J3-3: 5J7-3	Q73	AE-23-800	
20	Right Kicker ("sling")	Special #4	Blu-Yel	1P19-6	5J3-4: 5J7-5	Q69	AE-26-1500	
21	Lower Jet Bumper	Special #5	Blu-Gm	1P19-8	5J3-2: 5J7-2	Q77	AE-23-800	
22	Not Used	Special #6	Blu-Blk	1P19-9	5J3-1: 5J7-1	Q79		
-	<u>Right Flipper</u>	-	Om-Vio	1P19-1	2J3-1: 2J18-10: 7P1-15	-		
	Lower Right Flipper		[Blu-Vio] ²		[7P1-16: 2J18-6: 2J17-4]		FL11630/50VDC	
-	<u>Left Flipper</u>	-	Om-Gry	1P19-2	2J3-2: 2J18-9: 7P1-18	-		
	Lower Left Flipper		[Blu-Gry] ²		[7P1-19,2J18-5,2J17-3]		FL11630/50VDC	

Notes: 1. Wire colors, except flipper Om-Vio and Om-Gry, are ground connections (to coil terminal with unbanded end of diode). Flipper Om-Vio and Om-Gry wires connect from CPU Board to flipper switch. 2. Flipper connections shown in braces are from flipper switch to flipper coil. 3. "A" circuits are pulsed, when Sol. 12 is de-energized; "C" circuits are pulsed, with Sol. 12 energized. Wire colors in brackets are those from respective A and C terminals corresponding to the J1-terminal connection listed for the Aux Power Driver Bd, which controls the device pulsing by Sol. 12. 4. Relay is mounted on Relay Bd, p/n C-11998-1. 5. Relay is mounted on Aux Power Driver Bd, D-12247 in the backbox.

TAXI Lamp-Matrix Table

COLUMN ROW	1 Q66 YEL-BRN 1J7-1	2 Q64 YEL-RED 1J7-2	3 Q62 YEL-ORN 1J7-3	4 Q60 YEL-BLK 1J7-4	5 Q58 YEL-GRN 1J7-6	6 Q56 YEL-BLU 1J7-7	7 Q54 YEL-VIO 1J7-8	8 Q52 YEL-GRY 1J7-9
Q80 RED-BRN 1J6-1	JOYRIDE 10,000 1	AIRPORT 20K 9	PIN-BOT (Center) 17	PIN-BOT 25	2X 33	AIRPORT (Right) 41	5th Display Light #1 JACKPOT 49	SPINOUT 1,000 57
Q81 RED-BLK 1J6-2	JOYRIDE Spot Pasngr 2	AIRPORT 75K 10	DRACULA (Center) 18	DRACULA 26	4X 34	AIRPORT (Left) 42	5th Display Light #2 JACKPOT 50	SPINOUT 5,000 58
Q82 RED-ORN 1J6-3	JOYRIDE Mystery 3	AIRPORT 100K 11	MARILYN (Center) 19	MARILYN 27	3X 35	JOYRIDE 43	5th Display Light #3 Meter 51	SPINOUT 10,000 59
Q83 RED-YEL 1J6-5	JOYRIDE EXTRA BALL 4	AIRPORT 150K 12	SANTA (Center) 20	SANTA 28	5X 36	JACKPOT When Lit 44	5th Display Light #4 Meter 52	SPINOUT 25,000 60
Q84 RED-GRN 1J6-6	JOYRIDE SPECIAL 5	AIRPORT 200K 13	GORBIE (Center) 21	GORBIE 29	Left Outlane 37	MILLION When Lit 45	RED Traffic Light 53	SPINOUT 50,000 61
Q85 RED-BLU 1J6-7	Williams Arcade #1 6	C (Top Lane) 14	Left Express Lane 22	Shoot Again 30	Left Return Lane 38	EXTRA BALL W/L 46	YELLOW Traffic Light 54	SPINOUT 75,000 62
Q86 RED-VIO 1J6-8	Williams Arcade #2 7	A (Top Lane) 15	Right Express Lane 23	Passengers Carried 31	Right Outlane 39	Carry Passengers W/L 47	GREEN Traffic Light 55	SPINOUT 100,000 63
Q87 RED-GRY 1J6-9	Williams Arcade #3 8	B (Top Lane) 16	Raise JACKPOT 24	LOCK 32	Right Return Lane 40	RELEASE 48	Williams Arcade #4 56	Williams Arcade #5 64

TAXI Switch-Matrix Table

COLUMN ROW	1 Q45 GRN-BRN 1J8-1	2 Q49 GRN-RED 1J8-2	3 Q44 GRN-ORN 1J8-3	4 Q48 GRN-YEL 1J8-4	5 Q43 GRN-BLK 1J8-5	6 Q47 GRN-BLU 1J8-7	7 Q42 GRN-VIO 1J8-8	8 Q46 GRN-GRY 1J8-9
1 WHT-BRN 1J10-9	Plumb Bob Tilt 1	Playfield Tilt 9	Left Jet Bumper 17	Left Ramp Entry 25	Right Ramp 33	41	49	Lane Change Right 57
2 WHT-RED 1J10-8	2	Outhole 10	Left Kicker ("sling") 18	Right Ramp Entry 26	Left Ramp 34	42	50	Lane Change Left 58
3 WHT-ORN 1J10-7	Credit Button 3	Ball Trough #1 11	Right Jet Bumper 19	Mdl 3-Bank DT (left) 27	Catapult 35	Top Kicker 43	51	59
4 WHT-YEL 1J10-6	Left Coin Chute 4	Ball Trough #2 12	Right Kicker ("sling") 20	Mdl 3-Bank DT (mid) 28	Right Eject 36	SPINOUT 44	52	60
5 WHT-GRN 1J10-5	Center Coin Chute 5	Top Eject Hole 13	Lower Jet Bumper 21	Mdl 3-Bank DT (right) 29	Left Outlane 37	45	53	61
6 WHT-BLU 1J10-3	Right Coin Chute 6	C Top Lane 14	Ball Shooter 22	R 3-Bank DT (top) 30	Left Return Lane 38	46	54	62
7 WHT-VIO 1J10-2	Slam Tilt 7	A Top Lane 15	Top Lane Entry 23	R 3-Bank DT (mid) 31	Right Outlane 39	47	55	63
8 WHT-GRY 1J10-1	High Score Reset 8	B Top Lane 16	Tips Carried 24	R 3-Bank DT (bottom) 32	Right Return Lane 40	48	56	64

WARNINGS & NOTICES

WARNING

FOR SAFETY AND RELIABILITY, *WILLIAMS ELECTRONICS GAMES* does not recommend or authorize any substitute parts or modifications of *WILLIAMS*' equipment. Use of Non-*WILLIAMS*' parts, or modifications of game circuitry, may adversely affect game play, or may cause injuries.

SUBSTITUTE PART OR EQUIPMENT MODIFICATIONS may void FCC Type Acceptance.

BECAUSE THIS GAME IS PROTECTED by Federal copyright, trademark, and patent laws, unauthorized game conversions may be illegal under Federal law.

THIS 'CONVERSION' PRINCIPLE ALSO APPLIES to unauthorized facsimiles of *WILLIAMS*' equipment, logos, designs, publications, assemblies, and games (or game features not deemed to be in the public domain), whether manufactured with *WILLIAMS*' components or not.

WARNING

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

WARNING

FCC STICKER. Check the back of your **TAXI** game to verify that an FCC-certification sticker was attached to your game at the factory.

All games that leave *WILLIAMS*' plants have been tested and found to comply with FCC Rules. Because the sticker is proof of this fact, legal repercussions to the owner and distributor of the game may result, if the sticker is missing. If you receive any *WILLIAMS* game, manufactured after December 1982, that has no FCC sticker, call *WILLIAMS*' for advice or write us a note on your Game Registration Card. Be sure that the card bears your game's serial number.

RF Interference Notice

CABLE HARNESS PLACEMENTS and ground strap routing on this game have been designed to keep RF radiation and conduction within levels accepted by the FCC Rules.

TO MAINTAIN THESE LEVELS, reposition harnesses and reconnect ground straps to their original placements, if they become disconnected during maintenance.

Notice

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FOR SERVICE...

CALL your authorized
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WARNING: Transport this game **ONLY** with hinged backbox down!