



Program Summary Report: S-Plus Stepper Slot Version SP1145

COMPLETE SET OF SLOT GAME CHIPS

- Game PROM** Programmable Read-Only Memory. The game program is stored on this PROM. The PROM is a 27C512 device, and the label indicates S-PLUS GAME, the version (SP1145), and the game type.
- NOTE: This PROM must have a 120 ns or faster access time and must be installed on a 16 MHz processor board.*
- Data PROM** The companion data PROM is a 27C64 device that identifies the reel-strip symbols and determines the game type, payable values, progressive capability, number of reels, maximum bet, and whether the game is a multi-line game, multi-coin game, scattered pay, or buy-a-pay game. The label indicates S-PLUS REEL and the SS number that identifies the payable.
- Set Chip** IGT utility program SET089, SET090, or SET091 is required to configure options for this version. For information about using the set chips, refer to the appropriate set chip PSR.

GAME TYPES

Type 0 (no special features), Type 1 (Slam Dunk, Balloon Bars, etc.), Type 4 (Spin 'Til You Win), and Type 5 (4th of July).

FEATURES AND CAPABILITIES

- Bill Acceptor** Uses ID-023. Acceptable bill denominations are \$1, \$5, \$10, \$20, \$50, and \$100. If the bill pay mode selection is disabled, all inserted bills are paid from the hopper, regardless of the game credit type. If the bill pay mode selection is enabled, the operator can specify in self test how inserted bills are paid. Use the set chip to enable/disable the bill pay mode selection.
- Bill Rejection Feature** Bills are rejected if any of the following conditions occur: a \$5 bill is inserted and the game denomination is \$2, a \$50 bill is inserted and the game denomination is \$20, the game denomination is higher than the bill denomination, or the credit value of the inserted bill plus any credits on the game exceeds the bill acceptor credit limit that is set in the self test mode.
- Credit Limit** Set in the self test mode.
- Denomination Modifications** Requires the set chip. When the denomination is set to zero (none), the bill acceptor is disabled (if present), the game does not display progressive amounts, and all progressive wins cause the game to go to a hand-pay condition. The denomination can be set at \$0.01, \$0.05, \$0.10, \$0.25, \$0.50, \$1, \$2, \$5, \$10, \$20, \$25, \$50, \$100, \$500, \$1,000, or zero (none).
- Hand-Pay Display** The amount to be hand paid by an attendant is displayed in the Credits and the Winner Paid windows. This information alternates with the amounts normally displayed in these windows. The hand-pay amount contains leading zeros instead of blanks so that it can be identified easily. The tilt error codes 3100

(for an extra coin out), and 3200 (for a coin-out tilt) also appear in the alternating display if these conditions occur while the machine is in the hand-pay condition.

Information Systems Compatibility

IGT SAS. This version supports long polls and exceptions available in SAS protocols up to and including 3.06; however, not all long polls and exceptions in these protocols are used by this version. SAS 4.0 or later is required for SAS bonusing. SAS 4.02 is required for secure count hopper and hopper-level reporting features. A list of the supported long polls and exceptions is available, provided a nondisclosure agreement signed by the requester is on file with IGT.

Mechanical Meters

Counts coins in, coins out, drop, jackpots x 10, canceled credits, and games played.

Power Reset Notification

When the power has been reset, the game flashes the Insert Coin lamp until the player plays one complete game.

Progressive Features/Displays

Nonprogressive; link or standalone progressive; single-level, single-level alternating, or double-level progressive; or SAS progressive; provided the payable supports the progressive capability. The SAS progressive option requires a group number to distinguish the number of progressive levels that can be enabled on the machine through SAS. For example, one carousel might offer three progressive levels on its machines, another carousel six progressive levels, and a third carousel only the top progressive level. A unique group number would be assigned to the machines on each carousel.

Reduced Hopper Fills

To prevent the hopper from being emptied when a player cashes out a large number of credits, a credit limit, a hopper limit, and a jackpot limit can be specified in the self test mode. The game always attempts to direct a win to the credit meter, unless adding the win to the meter exceeds the credit limit. If the win cannot be applied to the credit meter, the game attempts to pay the win from the hopper. Wins and cash outs greater than the hopper limit create a hand-pay condition, as does any win that exceeds the jackpot limit. For example, if the jackpot limit is set to the coin/credit equivalent of \$1,200, the game will lock up for IRS reporting, when needed. If the hopper limit is set to a low amount and the credit limit is set to a large amount, the player could accumulate a large number of credits, but hopper fills would be reduced because a large cash out would create a hand-pay condition.

Reel Reset

To indicate that the reels are not spinning and stopping for a new game, the reels stop in reverse order (5, 4, 3, 2, 1) when resetting. The reels also stop in reverse order when the last games recall function is entered.

Reel Stops

Capable of handling 512 stops per reel.

Reel Tilts

If a reel tilt occurs while the reels are spinning, the affected reel(s) spin very slowly, even with the door open, until the tilt is cleared. All reel tilts are treated as hard tilts and require an attendant to reset the machine. To reset a

reel tilt that occurs during game play while the reels are spinning, open the main door, turn the jackpot reset key, and close the door.

SAS Bonus Feature

To use the SAS bonus features, the SAS address must be {001}, the SAS bonusing option must be enabled with the set chip, and the machine must be equipped with the DCN+ player tracking device. When the SAS bonusing option is enabled, two bonus features are enabled at the same time: bonus pays and multiplied jackpot mode. These features can not be enabled or disabled individually. Wins from game play and pending bonuses are awarded at the ends of games. The multiplied jackpot mode allows wins to be multiplied by a number (one to ten) supplied by the SAS host. The minimum and maximum win amounts that are eligible to be multiplied are also sent by the SAS host.

Secure Count Hopper

Hopper-level reporting through SAS and visual notification if a secure hopper is installed.

Service (Door-Just-Closed) Notification

The Coins Played digit flashes from the time the door is closed until the end of one complete game.

Two- or Three-Stage Candle

The top level signifies tilt/jackpot/change conditions; the bottom level signifies jackpot/door-open conditions. If the drop door is opened while the drop-door monitoring option is enabled, the door-open candle flashes at twice the normal door-open rate. If the game is disabled, both levels are lit.

A three-stage candle is only used with this game version if a secure count hopper is installed. If a three-stage candle is installed, the top two stages function the same as a two-stage candle, and a lit bottom level indicates a low hopper level. The three-stage candle requires special harnessing.

***NOTE:** The door-open candle (bottom level on two-stage, middle level on three-stage) does not continue to flash once the main door is closed. Instead, the door-open candle returns to its previous game status prior to the door being opened (off, on, or flashing).*

DIP SWITCH OPTIONS

This version is not affected by DIP switch settings.

SELF TEST MODE

The numbers enclosed in < > represent the self test page number, [] represent the option number, and { } represent the setting. During a tilt condition or while credits are accumulated, only the bill acceptor tilt mode and out of service mode can be modified.

The self test mode consists of three groups. General instructions for setting options within groups are provided below. Specific instructions are provided where applicable.

Group 1 -- Communications Options

To change the option setting or to increment the digit value, turn the jackpot reset key. To change the blinking digit position, press the Spin Reels button. To move to the next self test page, press the self test button.

SAS Communication

Address Display<0>

Displays the machine address set with the set chip.

Group 2 -- Page Zero Options

To change the option setting, press the Spin Reels button. To move to the next page zero option, turn the jackpot reset key. To move to Group 3 at any time within the zero pages, press the self test button.

Reel-Spin Sound <0> [2]

Options are reel-spin tones and reel-stop sounds {0} or reel-spin tones only {1}.

Volume Control <0> [3]

Sets the volume for all sounds and music produced by the sound generator (for the reel game). Options range from loudest volume level {1} to lowest volume level {9}.

Credit Mode <0> [5]

Options are standard credit or noncredit {0}, player-initiated credit {1}, and player-initiated noncredit {2}. The player-initiated credit option defaults to the noncredit mode when the credit meter remains at zero for more than 30 seconds, or when any accumulated credits are cashed out. The player-initiated noncredit option defaults to the credit mode if the game is idle for 30 seconds, and it remains in the credit mode when credits are cashed out.

Mechanical Bell <0> [6]

Options are ring on hand pays only {0} or ring on all pays {1}.

Drop-Door Switch
Monitoring <0> [7]

The drop-door monitoring option is automatically enabled with SAS communications. Options are enabled {1} or disabled {0}. If enabled, the number of times the drop door is opened is monitored and displayed in the statistical data mode.

Bill Acceptor
Pay Mode <0> [8]

The bill acceptor must be enabled with the set chip to change this option. Options are pay coins from the hopper {2}, convert bills to credits {1}, and follow the player-initiated credit {0}. If set to follow the player-initiated credit, bills are converted to credits if the player has selected the credit mode, or paid from the hopper if the player has selected the noncredit mode.

Bill Acceptor
Display <0> [9]

Indicates whether the bill acceptor is enabled {1} or disabled {0}. The set chip is required to enable and disable the bill acceptor.

Extra Coins In
Display <0> [10]

Extra coins that are received after the maximum bet is reached are paid from the hopper {0}.

EFT Display <0> [11]

Indicates whether EFT is enabled {1} or disabled {0}. The set chip is required to set this option.

Hand-Pay Display <0> [13]	Options are enabled {1} or disabled {0}. If enabled, the hand-pay amount is displayed when the game goes into a hand-pay condition.
Bill Acceptor Tilt Mode Selection <0> [16]	This option can only be changed if the bill acceptor is enabled. Determines how bill acceptor tilts are handled. If set to no tilt {0}, game play continues. If set to soft tilt {1}, game play continues and the tilt lamp flashes until the tilt is cleared. Soft tilts can be cleared by a valid bill transaction, by closing the door, by entering the self test mode, by entering the display meters function in the statistical data mode, and by playing door-open games. If set to hard tilt {2}, the bill acceptor is disabled, game play halts, and the tilt lamp flashes until the tilt is cleared. Hard tilts are cleared by opening and closing the main door.
Country Code Display <0> [30]	Displays the country code associated with the bill acceptor: United States {37} or Canada {7}. The set chip is required to set this option.
Progressive Selection Display <0> [31]	Displays progressive settings: none {0}; primary-level link, secondary-level link {1}; primary-level link, secondary-level standalone {2}; primary-level standalone, secondary-level standalone {3}; and primary-level standalone, secondary-level link {4}. The set chip is required to set this option.
Partial Pay on Top Award Option <0> [34]	Determines whether a partial pay is made when the top award is hit. Options are enabled {1} or disabled {0}. If enabled, the amount paid is set in the partial pay selection page. If disabled, the entire win must be hand paid.
Progressive Level Display <0> [35]	Displays the progressive level: one progressive level {1}, or two progressive levels {2}. The set chip is required to set this option.
Max Bet Autospin Option <0> [39]	Determines whether the reels spin automatically when the maximum bet is reached or when the Play Max Credits button is pressed. Options are enabled {1} or disabled {0}.
Progressive Type Display <0> [60]	Displays the progressive type: high/low {0}, or alternating {1} progressive. The set chip is required to set this option.
SAS Progressive Display <0> [63]	Indicates whether the SAS progressive is enabled {1} or disabled {0}. The set chip is required to set this option.
SAS Bonusing Display <0> [64]	Indicates whether the SAS bonusing option is enabled {1} or disabled {0}. The set chip is required to set this option.

Group 3 – Miscellaneous Tests & Configurations

To change the option setting or to increment the digit value, press the Spin Reels button. To change the blinking digit position, turn the jackpot reset key. To move to the next self test page, press the self test button. Specific instructions are provided where applicable.

Input Tests <1>

Allows testing of machine inputs. The Winner Paid window indicates the input number and whether it is active {1} or inactive {0}.

#	Input	#	Input
10	Coin in A	24	Reel mechanism
11	Coin in B	25	Self test button
12	Coin in C	26	(Reserved)
13	Door closed	27	Bill acceptor
14	Hopper coin out	30	(Reserved)
15	Hopper full	31	Drop door
16	Handle/Spin button	32-37	(Reserved)
17	Jackpot reset key	40	Reel #1
20	Bet One Credit	41	Reel #2
21	Play Max Credits	42	Reel #3
22	Cash Out	43	Reel #4
23	Change light	44	Reel #5

Output Tests <2>

Allows testing of machine outputs. The Winner Paid window indicates the output number and whether it is active {1} or inactive {0}.

#	Output	#	Output
10	Coin drop meter	27	Jackpots meter
11	Coin-out meter	31	Change candle lamp
12	Coin-in meter	32	(Reserved)
13	B switch for SDS	33	Diverter
14	Hopper drive #2	34	Coin lockout
15	Stepper motor direction	35	Hopper drive #1
16	Mechanical bell	36	Payline lamp #1
17	Canceled credits meter	37	Payline lamp #2
20	Payline light #3	40	Stepper motor power
21	Payline light #4	41	Insert Coin lamp
22	Payline light #5	42	Coin Accepted lamp
23	Payline light #6	43	Low hopper indicator
24	Door optics transmitter	44	Play Max Credits lamp
25	Games played meter	45	Bet One Credit lamp
26	Bill acceptor	46	Cash Out lamp

Sound Test

Winner Paid window = 50. Tests sounds (coin insertion, maximum coins in, etc.). Turn the jackpot reset key to select a sound. Press the Spin Reels button to play the sound.

Song Test

This page is displayed only if the game is Type 4 or 5. Allows the song to be tested. Turn the jackpot reset key to play the song.

Display Test <8>

Tests illumination on the player digital display and verifies that the digital display is receiving correct signals from the processor board. Part one: The digit 8 is displayed in every position of the display. Press the self test button to display part two: The digits 1, 2, 4, and 8 are displayed sequentially in every position of the display.

Hopper Test <3>

Tests the hopper operation by paying out ten coins. Turn the jackpot reset key to enter the hopper test.

If a secure count hopper is installed, the Credits window displays hopper status (left digit), and hopper level (right digit).

Hopper Status	Description
0	Status OK
1	Optics flooded with light
2	Coin out reverse direction directed
3	Coin optic exit time too short
4	Coin optic exit time too long

Hopper Level	Description
0	Hopper low
1	One-third full
2	Two-thirds full
3	Hopper full

Paytable Test <4>

The game type (0, 1, 4, or 5) and the first two digits of the reel-strip number are alternately displayed in the Winner Paid window. The version number and the last four digits of the reel-strip number are alternately displayed in the Credits window. To enter the paytable test, turn the jackpot reset key. To test payable values, the physical stops for all the reels must be entered. To input and increment the physical stop, press the Spin Reels button. Winner Paid window = physical stop. Credits window = reel number. To select the next reel, turn the jackpot reset key. After selecting the physical stop for the last reel, turn the jackpot reset key to spin the reels to the entered physical stops. After the reels stop, the pay amount for the reel combination is displayed in the Winner Paid and Credits windows, and it alternates with the number of coins bet in the Winner Paid window. To view all award amounts, from one coin wagered up to the max bet, press the Spin Reels button.

Reel-Strip Test <5>

Allows the operator to view the upper and lower virtual limits for all the reels by inputting the physical stops. Turn the jackpot reset key to enter the reel strip test. To operate the reel-strip test, the physical stops for all the reels must be entered. To input and increment the physical stop, press the Spin Reels button. Winner Paid window = physical stop. Credits window = reel number. To select the next reel, turn the jackpot reset key. After selecting the physical stop for the last reel, turn the jackpot reset key to spin the reels to the entered physical stops. Winner Paid window = lower virtual limit. Credits

window = upper virtual limit. The virtual limits alternate with the reel number. To view the next reel, press the Spin Reels button.

Denomination Display <6>

Displays the current denomination. The set chip is required to change the denomination.

Hopper Limit <7> [1]

Determines when hand pays and hopper pays occur.

Jackpot Limit <7> [2]

Any single win over this limit causes the machine to go to a hand-pay condition.

Credit Limit <7> [3]

Determines the maximum number of credits that can be accumulated.

Bill Acceptor

Credit Limit <7>

Determines the maximum number of credits that can be accumulated before the game stops accepting bills. This limit must be less than or equal to the credit limit, or a maximum of \$2,500.

Partial Pay Amount <8>

Determines the number of coins paid from the hopper when a jackpot is hit, before a hand-pay condition occurs. If the selected value exceeds the hopper or jackpot limit, the game automatically resets it to zero.

Standalone Progressive #1

Display <9>

This page is displayed only if the primary level is specified as standalone in the progressive option selection page and the primary progressive parameters are set with the set chip. Winner Paid window = primary-level parameter number. Upper portion of progressive display unit = amounts and data for the primary standalone progressive award.

Standalone Progressive #2

Display <9>

This page is displayed only if the secondary level is specified as standalone in the progressive option selection page and the secondary progressive parameters are set with the set chip. Winner Paid window = secondary-level parameter number. Lower portion of progressive display unit = amounts and data for the secondary standalone progressive award.

Link Progressive Display <9>

This page is displayed only if at least one level is specified as link in the progressive option selection page. If the SAS progressive option is enabled, SAS link progressive amounts are displayed in this page. Credits window = how many link levels are enabled {1} or {2}. Press the Spin Reels button to display link progressive information. Coins Played window = link progressive level 1 or 2. The progressive display units show the link progressive amounts. The Winner Paid and Credits windows also display the link progressive amounts.

Rejected Bill Limit <11>

Determines the number of times bills are rejected before the change lamp is switched on. The range is 0 to 99. If set to 0, the change lamp is not affected by rejected bills.

SAS Progressive Group

Selection <27>

Allows the setting of a progressive group number. Press the Spin Reels button to select the digit to be changed. Increment the value of the digit by turning the jackpot reset key. When all digits have been selected, press the Change button to save the new value.

SAS Machine Serial Number Selection <28>

Allows the setting of a machine serial number. The Winner Paid window = first four digits of serial number, and the Credits window = last four digits of the serial number. Press the Spin Reels button to select the digit to be changed. Increment the value of the digit by turning the jackpot reset key.

NOTE: When all digits have been selected, press the Change button to save the new value.

Out of Service Page <90>

If enabled {1}, this function renders the machine inoperative without turning the power off. To place the machine in the out of service mode, close the main door while in this page. To place the machine back in service, perform the following steps: open the main door; press the self test switch to enter the out of service mode page; then exit this self test page by pressing the Spin Reels player switch.

STATISTICAL DATA MODE

Turn the jackpot reset key to enter the statistical data mode and to move from one function to the next.

Display Meters Function <1>

Coins Played = 1. Winner Paid = Group number, alternating with the first four digits of the meter value. Credits = Meter number, alternating with the last four digits of the meter value. Press the Spin Reels button to display the first meter in a group and to page through meters within a group. Turn the jackpot reset key to advance from one group to the next (and to the next page of this mode). The groups and meters appear in the following order:

Master Money Accounting <1>

- 01 Coins in (total wagers)
- 02 Coins out (total won; includes all SAS bonusing pays)
- 03 Drop (coins and bills)
- 04 Drop (coin)
- 05 Canceled credits (hand-paid cash out amount in coins)
- 06 Amount of jackpots in coins (includes all SAS bonusing hand pays)
- 07 Physical coins inserted
- 08 Coins dispensed by the hopper
- 09 Credits played
- 10 Credits won
- 11 Credits paid
- 12 Hopper throughput sign (positive {0}, negative {1})
- 13 Hopper throughput (total coins into and out of hopper)

Master Statistics Accounting <2>

- 01 Games played
- 02 Games won
- 03 Games lost

- 04-13 Games played with from 1 to 10 coins in (number of coins in depends on options)

Master Bill Accounting <3>

- 01 \$1 bills accepted
- 02 \$2 bills accepted
- 03 \$5 bills accepted
- 04 \$10 bills accepted
- 05 \$20 bills accepted
- 06 \$50 bills accepted
- 07 \$100 bills accepted
- 08 Bills accepted
- 09 Coins or credits dispensed for bills
- 10 Dollar value of bills accepted
- 11 Bill acceptor cash box removed (this version does not support this option)
- 12 Bill acceptor cash box full (this version does not support this option)

Master EFT Accounting <4>

- 01 Cashable credits downloaded
- 02 Non-cashable credits downloaded
- 03 Promotional credits downloaded
- 04 Credits cashed out to the system

Period Bill Accounting <5>

01	\$1 bills accepted since last meter reset
02	\$2 bills accepted since last meter reset
03	\$5 bills accepted since last meter reset
04	\$10 bills accepted since last meter reset
05	\$20 bills accepted since last meter reset
06	\$50 bills accepted since last meter reset
07	\$100 bills accepted since last meter reset
08	Bills accepted since last meter reset
09	Coins or credits dispensed for bills since last meter reset
10	Dollar value of all bills accepted since last meter reset

Security Accounting <6>

01	Games played since last main door closed
02	Games played since last power up
03	Door opens
04	Coin drop door opens

Error Accounting <7>

01	Coin-in tilts
----	---------------

02	Hopper-empty tilts
03	Coin-out tilts
04	Power resets
05	Processor board battery tilts
06	Reel #1 tilts
07	Reel #2 tilts
08	Reel #3 tilts
09	Reel #4 tilts
10	Reel #5 tilts
11	Reel mechanism tilts
12	Bill acceptor stacker jams
13	Bill acceptor hardware tilts
14	Bill acceptor reverse bills

Progressive Accounting <8>

01-02	(Reserved)
03	Primary progressive hits
04	Secondary progressive hits

SAS Bonus Information <10>

01	SAS deductible bonus wins
02	SAS non-deductible bonus wins
03	SAS matched wagers

Last 10 Games Recall Function <2>:

Pressing the Spin Reels button causes the reels to spin and stop, to the position of the previous game, beginning with the most recent game. Winner Paid = number and virtual position of the reel. Credits = game being displayed. If the game is Type 1, the Credits window also indicates the number and virtual position of the reel after any nudging is done. If the game is Type 4 or Type 5, the Credits window also indicates either 0 (standard game) or 1 (free spin). After the last reel has been displayed, the Coins Played, Winner Paid, and Credits windows contain their normal information for the last game. The hand-pay information is also displayed during the last games recall if the hand-pay display option is enabled and a hand pay occurred. Press the Spin Reels button to display bonus awards for that game. The bonus amount is displayed with all leading zeroes.

Bill Acceptor Transactions <9>:

All LED displays show 9 until the Spin Reels button is pressed. Coins Played = last bill transaction 1 (most recent) through 5 (oldest). Winner Paid = number of coins dispensed or credits given, beginning with the most recent transaction. Credits = bill denomination.

IGT Service Utility Information <3>:

Coins Played = 3.

Progressive Jackpot Recall <4>:

Winner Paid = a number from 50 to 1. The progressive display shows the amount won, beginning with the most recent jackpot awarded. A multiplier value, if any, is displayed in the rightmost digit(s) of the Credits window if a progressive win was multiplied during the multiple jackpot mode.

EFT Transactions <5> through <9>:

Turn the jackpot reset key to view each category; press the Spin Reels button to view the last five transactions within each category. The category is displayed in the Coins Played window: 5 = downloaded non-cashable credits, 6 = downloaded cashable credits, 7 = downloaded promotional credits, 8 = cash outs to the system, 9 = forced cash outs to the hopper. The far left digit in the Winner Paid window = 1 (acknowledgment received, transaction processed) or 0 (no acknowledgment, transaction not processed). The far right digits in the Winner Paid window indicates the transaction status: 00 = successfully completed, 01 = no game denomination set, 03 = downloaded credit not a multiple of game denomination, 04 = downloaded credit exceeds credit limit. The Winner Paid window also alternately displays the transaction number. The Credits window = number of credits transferred, alternating with the transaction reference number; 1 represents the most recent transaction, and 5 represents the oldest.

Clearing Resettable Bill Meters <10>:

The resettable bill meters keep a count of the bill acceptor transactions since the last time the meters were cleared. If any of the resettable bill meters is not equal to zero, {8888} is displayed in both the Credits and Winner Paid windows. Press the Spin Reels button to clear the resettable meters. {0000} is displayed in the Credits and Winner Paid windows when the meters are cleared.

EFT Meters Breakdown <12>:

If the main door is open, this function is not available for viewing. Pressing the Spin Reels button advances through the two EFT meters. If the Coins Played window = 1, the Credits window = promotional credits. If the Coins Played window = 2, the Credits window = buffered credits (bill transactions, cashable downloads, and non-cashable downloads).

CLEARING TILTS

Malfunctions in the S-Plus machine cause the machine to enter a tilt state. The tilt codes are displayed in the Winner Paid window; they are defined below.

Tilt Code	Malfunction	Clearing the Tilt
12	Low battery	Replace battery. Open and close door.
21	Coin-in	Open and close door.
23	Excessive extra coins in	Open and close door.
3100	Extra coin out	Open and close door.
3200	Coin jam in hopper	Open and close door.
3300	Hopper empty	Open and close door.
34_0	Hopper optics blocked	Open and close door.
35_0	Coin out reverse direction detected	Open and close door.
36_0	Coin optic exit time too short	Open and close door.
36_1	Coin optic exit time too long	Open and close door.
41	Reel 1 tilt	Open and close door.
42	Reel 2 tilt	Open and close door.
43	Reel 3 tilt	Open and close door.
44	Reel 4 tilt	Open and close door.
45	Reel 5 tilt	Open and close door.
49	Reel mechanism disconnected	Reconnect reel mechanism. Open and close door.

Tilt Code	Malfunction	Clearing the Tilt
61	Bad CMOS RAM	Open door and press self test button for 2 to 3 seconds. See 61_1.
61_1	Game data reset	Close door and turn jackpot reset key.
61_2	Recoverable CMOS error	Open door and press self test button for 2 to 3 seconds. See 61_1.
61_3	Hardware malfunction	Open door and press self test button for 2 to 3 seconds. See 61_1.
62_0	Bad game PROM	Replace game PROM.
62_1	Bad data PROM	Replace data PROM.
64	Communication link down	Restore communications.
65_0	Bad EEPROM device	Replace EEPROM with a blank one.
65_1	Bad EEPROM data	Open door and press self test button for 1 to 2 seconds.
65_2	Game type mismatch	Open door and press self test button for 1 to 2 seconds.
65_3	Game options & meters not in most current format	Recover options & meters by using correct set chip. OR Turn jackpot reset key to continue power-up procedure. Game will be upgraded to most current format. See 65_1 or 65_2.
67	Data PROM changed	Open door. Turn machine off, then on.
68	Non-compatible data PROM	Install correct data PROM.
99_1	Stacker jam	Open and close door.
99_2	Cash box removed	Open and close door.
99_4	Cash box full	Open and close door.
99_5	Hardware error	Open and close door.
99_6	Reverse bill detected	Open and close door.

REFERENCES

Refer to the appropriate IGT publication for detailed information about S-Plus software and error resolutions: *Game Software -- S-Plus Products* p/n 821-206-0x, *Troubleshooting -- Game Machines* p/n 821-283-0x, or *S-Plus Diagnostic Card Set* p/n 821-154-0x. Refer to the Reel-Strip Listing for exact payable information and symbol alignment on each reel. For CVT information, refer to *EZ Route CVT Operator's Guide* p/n 821-249-0x.

For additional information or to order manuals, contact IGT Customer Service, 9295 Prototype Drive, Reno, Nevada, (USA) 89511-8986; telephone 775-448-0364, between 8 a.m. and 4 p.m. PST; FAX 775-448-0675.

For viewing and downloading technical information, visit IGT Products (www.igtproducts.com).

November 18, 1999