IGT Part Number: 821-357-00

Machine Specifications
8032 Products

International Game Technology

Reno, Nevada October 31, 2001

Machine Specifications – 8032 Products

Warranty

IGT warrants that its products have been manufactured in conformity with all applicable jurisdiction regulations where this machine is licensed, and that during the warranty periods specified by contract, its products will be free from defects in workmanship and material. Minor deviations from specifications or descriptions shown in IGT product literature or service manuals which do not affect the performance of the product are not considered to be defects in workmanship or materials, and are not covered by this warranty. Operation or maintenance of the product other than as specified in IGT's service manuals, and any unauthorized modifications (even if intended to correct a problem) void all warranties. IGT's sole duty hereunder is to repair, correct, or, at IGT's option, replace defective products or parts during the contract warranty period only.

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WARNING!

The following servicing instructions are for use by QUALIFIED PERSONNEL ONLY. To avoid personal injury or damage to the equipment, do not perform any servicing other than that contained in this manual.

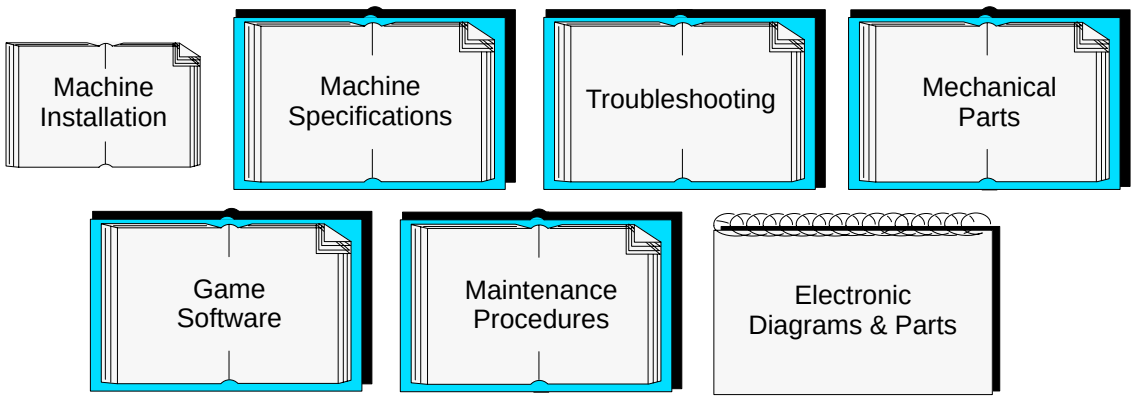
IGT
9295 Prototype Drive
Reno, Nevada 89511-8986
(775) 448-7777

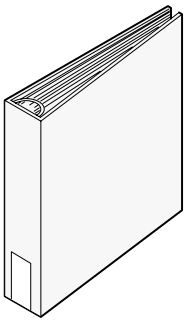
About Field Service Documentation

IGT manuals are structured to:

- Meet customer requests for separate parts and electronic manuals
- Reduce customer cost for manuals
- Allow customers to purchase the information they use most in the quantities they need

Complete Set of Documentation =
Seven Standalone Manuals





(Binders must be purchased separately.)

<u>Packaging</u>

Note: Most manuals are 8.5" x 11" format, shrink-wrapped and 3-hole punched to fit into a standard 3-ring binder.

Exceptions: Machine Installation, Electronic Diagrams & Parts.

Related Documentation

This manual contains machine specification information only. It should be used in conjunction with the appropriate IGT field service manuals for operations such as installation, troubleshooting, game software adjustments and maintenance. (IGT machines may be manufactured with components from a third–party vendor. For those components not documented in this manual, contact the component manufacturer directly.) The related documentation listed here is only an example and does not include all available manuals. Obtain a current list of available documentation by contacting IGT Customer Service or by logging–on to IGT's product information Web site. Refer to the Customer Services information that follows for more information.

Machine installation and troubleshooting manuals, designed to support all machines, include:

- ***Machine Installation*** manual (p/n 821-287-0X) contains overall installation instructions for all IGT machines.
- ***Troubleshooting: Game Machines*** manual (p/n 821-283-0X) contains procedures to diagnose and rectify common problems with hardware components for all IGT machines.

Game software manuals contain program information required to select options, test, diagnose and record cumulative data. The manuals are grouped by product family as follows:

- ***Game Software: S-Plus Products*** (p/n 821–206–0X)
- ***Game Software: Player's Edge-Plus Products*** (p/n 821–227–0X)

Maintenance manuals contain detailed procedures for routine maintenance, cleaning and repair/replacement of machine parts. Manuals are grouped by product family and cabinet design as follows:

- ***Maintenance Procedures: S-Plus Upright*** (p/n 821–203–0X)
- ***Maintenance Procedures: S-Plus Slant-Top*** (p/n 821–267–0X)
- ***Maintenance Procedures: Player's Edge-Plus 13" Upright Imbedded Bill Acceptor*** (p/n 821–229–0X)
- ***Maintenance Procedures: Player's Edge-Plus Slant-Top*** (p/n 821–275–0X)
- ***Maintenance Procedures: Player's Edge Plus Flat–Top Imbedded Bill Acceptor*** (p/n 821–331–0X)

Machine mechanical parts manuals contain exploded view illustrations and parts lists. Manuals are machine–model specific as follows:

- ***Mechanical Parts: S-Plus Upright Imbedded Bill Acceptor*** (p/n 821–205–0X)
- ***Mechanical Parts: S-Plus Upright Non-Imbedded Bill Acceptor*** (p/n 821–226–0X)
- ***Mechanical Parts: S-Plus Slant-Top*** (p/n 821–258–0X)
- ***Mechanical Parts: Player's Edge-Plus 13" Upright Imbedded Bill Acceptor*** (p/n 821–230–0X)
- ***Mechanical Parts: Player's Edge-Plus 13" Upright Non-Imbedded Bill Acceptor*** (p/n 821–233–0X)
- ***Mechanical Parts: Player's Edge-Plus Slant-Top*** (p/n 821–277–0X)
- ***Mechanical Parts: Player's Edge-Plus Flat-Top Imbedded Bill Acceptor*** (p/n 821–320–0X)

Machine electronic diagrams and parts manuals contain connector overviews, wiring diagrams, board assembly parts lists and schematics. Manuals are machine-model specific as follows:

- ***Electronic Diagrams & Parts: S-Plus Upright Non-Imbedded Bill Acceptor*** (p/n 821–225–0X)
- ***Electronic Diagrams & Parts: S-Plus Upright Imbedded Bill Acceptor*** (p/n 821–204–0X)
- ***Electronic Diagrams & Parts: S-Plus Slant-Top*** (p/n 821–259–0X)
- ***Electronic Diagrams & Parts: Player's Edge-Plus Upright Imbedded Bill Acceptor*** (p/n 821–231–0X)
- ***Electronic Diagrams & Parts: Player's Edge-Plus Upright Non-Imbedded Bill Acceptor***
- (p/n 821–232–0X)
- ***Electronic Diagrams & Parts: Player's Edge-Plus Slant-Top*** (p/n 821–276–0X)
- ***Electronic Diagrams & Parts: Player's Edge-Plus Flat-Top Imbedded Bill Acceptor*** (p/n 821–199–0X)

Related Videotapes

Videotapes are available in NTSC or PAL format.

- ***Machine Installation*** (p/n 828-008-XX) reviews pertinent procedures for installing machines in standard gaming or video lottery environments.
- ***Basic Machine Troubleshooting*** (p/n 828-010-XX) provides the beginning slot machine mechanic with the information necessary to troubleshoot IGT's stepper slot and video games.
- ***WBA Overview*** (p/n 828-024-XX) reviews the JCM world bill acceptor and identifies state-of-the-art design features such as easy maintenance, a more powerful microprocessing system, and the location and description of parts. Calibration and standard maintenance procedures are also provided. It is recommended that the ***WBA Quick Reference Card*** (p/n 821-257-0X) and the ***WBA Field Service Manual*** (p/n 821-256-0X) be used in conjunction with this video.
- ***Hopper Loading and Fill Information*** (p/n 828-025-XX) provides information detailing hopper loading and fills. Hopper probe settings, hopper levels, token orders and the variety of hopper types and sizes are shown. Additional information about token issues, initial hopper loads, calculations for drop, net win and hold percentages are also presented.
- ***Slot Math*** (p/n 828-027-XX) presents basic slot floor definitions and calculations for slot directors, slot managers and analysts to assist in meaningful assessment of gaming operations and floor performance. Presented in four sections – Basic Slot Definitions, Win Calculations, Par Sheets, and Slot Math Formulas.

Customer Services

Technical Information

General Product/Company Information

For viewing and downloading product information, including the most recently upated technical documentation, visit IGT at www.IGT.com:

Internet:	**http://www.IGT.com**
E-mail:	**Webmaster@IGT.com**
Tel:	775-448-1826

Publications

For questions regarding IGT publications, contact us at either the e-mail or phone number listed below. To order publications, contact IGT customer service:

E-mail:	**Marketing@IGT.com**
Tel:	775-448-1729

Parts information, Service and Machine-Related Technical Assistance

For product-repated information, or to order parts or publicaitons, contact our Customer Service Department.

Address:	**IGT Customer Service** **9295 Prototype Drive** **Reno, Nevada 89511-8986** **USA**
Tel:	775-448-0634 (8 a.m. - 4 p.m. PST)
Fax:	775-448-0675

Toll-Free Access

Call toll-free from North America or international locations. Additional access codes may be required from international locations.

North America:	**1–800–688–7890**
International:	**1–800–342–5694**

Table of Contents

Section 1

Introduction

IGT field service documentation consists of series of manuals. Each manual addresses a different aspect of field service and is designed to be used in conjunction with other standalone manuals related to specifications, installation, game software, troubleshooting, maintenance, electronics and parts. Most manuals are tailored for product group or, in some cases, product models. Refer to the About Field Service Documentation section in the front of this manual for a graphic representation of the manual series.

Each manual contains the following information to assist the reader in making the best use of IGT documentation:

- **About Field Service Documentation –** is included at the front of each manual, and includes a graphic representation of the IGT field service manual series.
- **Related Documentation and Related Videotapes –** appear at the front of each manual and list other books and videotapes that should be used in conjunction with this manual.
- **Glossary –** appears at the back of each book and lists terms and acronyms commonly used in IGT documentation.

This manual provides machine specifications for IGT S-Plus and Player's Edge-Plus machines. The content of this manual includes:

- **Section 1, Introduction –** provides IGT field service documentation information.
- **Section 2, S-Plus Products –** provides environmental, electrical, dimensional, stand and lock specifications for S-Plus machines.
- **Section 3, Player's Edge-Plus Products –** provides environmental, electrical, dimensional, stand and lock specifications for Player's Edge-Plus machines.

- **Section 4, Seats –** provides seat specifications.
- **Glossary –** defines terms commonly used in IGT service manuals.

Section 2

S-Plus ™ Products

This section contains specifications for S-Plus machines. Table 2-1 lists typical machine environmental specifications for all IGT machines.

Tables in individual sections list machine specifications and requirements, and figures in those sections show the dimensions for the following IGT machines:

- **Section 2.1 –** S-Plus Upright
- **Section 2.2 –** S-Plus Slant-Top

Table 2-1
Environmental Specifications – IGT Machines

Characteristic		Performance Requirement
Temperature (Environmental)	Operating	45°F – 100°F (ambient) 10°C – 38°C
	Storage	0°F – 176°F (ambient) -10°C – 80°C
Relative Humidity (Environmental)	Operating	10% to 90% (non-condensing)
	Storage	0% to 95% (non-condensing)

Important: *IGT requires a minimum distance of 6 inches (15.2 cm) between the side walls of any two machines.*

Calculate the number of machines that can safely be installed using the peak current requirements. Do not load a circuit to more than 80% of capacity.

For Example:

When installing machines with power requirements of 2.1 Amps per machine on a 20 Amp circuit

80% of 20 = 16 and 16 ÷ 2.1 = 7.6

This would allow 7 machines on this 20 Amp circuit.

Variations in configuration or the use of supplemental hardware may further restrict the number of machines that can be accommodated per circuit. It is important to verify the current requirements for the specific machines being installed to ensure the circuit breaker is sufficient for the load.

Some jurisdictions limit the current available at the service outlet within the machine. Check with jurisdictional regulating agencies to determine whether the current available at the internal service outlet is restricted.

2.1 S-Plus™ Upright

S-Plus upright machines operate from 99 – 128 VAC (115), 198 – 244 VAC (220), or 216 – 264 VAC (240), all at 50/60 Hz line frequency. A main transformer provides power to all components requiring isolated voltages. Tables and figures in this section define the following specifications:

- Electrical Specifications – Table 2-2
- Physical Specifications – Table 2-3
- Main Transformer Taps – Table 2-4
- Cabinet Dimensions – Figures 2-1, 2-2 and 2-3
- Base Dimensions – Figures 2-4, 2-5 and 2-6
- Stand Specifications – Tables 2-5 and 2-6
- Lock Specifications – Tables 2-7, 2-8 and 2-9

Table 2-2
Electrical Specifications – S-Plus Upright

Parameter		Specification
Line voltage	115	110 – 126 VAC
	230	220 – 252 VAC
	240	230 – 264 VAC
Power consumption (average)	115 V, 50/60 Hz	230 Watts
		2.7 Amps
		785 BTU/HR
	220 V, 50/60 Hz	255 Watts
		1.6 Amps
		870 BTU/HR
Current protection	F1	24 VAC, 4 Amps
	F2	7-8 VAC, 5 Amps
	F3	100/115 VAC, 6 Amps
		220/240 VAC, 3 Amps/115 VAC, 2 Amps
Line frequency		50/60 Hertz (Hz)

Table 2-3
Physical Specifications – S-Plus Upright

Characteristic			Specification
16” top box	**Height**		46.25” (117.5 cm)
	Width	Without handle	21.25” (54.0 cm)
		With handle	24.50” (62.2 cm)
	Depth	Base	16.00” (40.6 cm)
		Maximum	20.75” (52.7 cm)
	Weight	With bill acceptor	215 lbs. (96.8 kg)
		Without bill acceptor	195 lbs. (87.8 kg)
9” top box	**Height**		40.00” (101.6 cm)
	Width	Without handle	21.25” (54.0 cm)
		With handle	24.50” (62.2 cm)
	Depth	Base	16.00” (40.6 cm)
		Maximum	20.75” (52.7 cm)
	Weight	With bill acceptor	210 lbs. (94.5 kg)
		Without bill acceptor	190 lbs. (85.5 kg)
Round top	**Height**		46.00” (116.8 cm)
	Width	Without handle	21.25” (54.0 cm)
		With handle	24.50” (62.2 cm)
	Depth	Base	16.00” (40.6 cm)
		Maximum	20.75” (52.7 cm)
	Weight	With bill acceptor	210 lbs. (94.5 kg)
		Without bill acceptor	190 lbs. (85.5 kg)
Scalloped top	**Height**		49.00” (124.5 cm)
	Width	Without handle	21.25” (54.0 cm)
		With handle	24.50” (62.2 cm)
	Depth	Base	16.00” (40.6 cm)
		Maximum	20.75” (52.7 cm)
	Weight	With bill acceptor	210 lbs. (95.5 kg)
		Without bill acceptor	190 lbs. (85.5 kg)
Maximum combustible material weight			25.31 lbs. (11.4 kg)

Note: *The maximum combustible material weight figure is an estimate based on a typical machine configuration, and is for reference only.*

Each machine's weight may vary depending on the configuration of features and options. It is recommended that a reasonable factor of safety be incorporated to allow for variances in design and manufacturing of the individual products.

The information presented in this manual applies only to IGT equipment and in no way applies to other manufacturers' equipment in determining the combustible content of machines.

Table 2-4
Main Transformer Taps – S-Plus Upright

Type	Tap #	Transformer Voltage
115/220 VAC PRI	1	115/220 VAC Common (primary)
	2	115 VAC Hot (primary or auto)
	3	220 VAC Hot (primary)
	4	24 VAC Hot
	5	24 VAC Center Tap
	6	24 VAC Return
	7	7-8 VAC Common
	8	7 VAC Hot
	9	8 VAC Hot
115/240 VAC PRI	1	115/240 VAC Common (primary)
	2	115 VAC Hot (primary or auto)
	3	240 VAC Hot (primary)
	4	24 VAC Hot
	5	24 VAC Center Tap
	6	24 VAC Return
	7	7-8 VAC Common
	8	7 VAC Hot
	9	8 VAC Hot

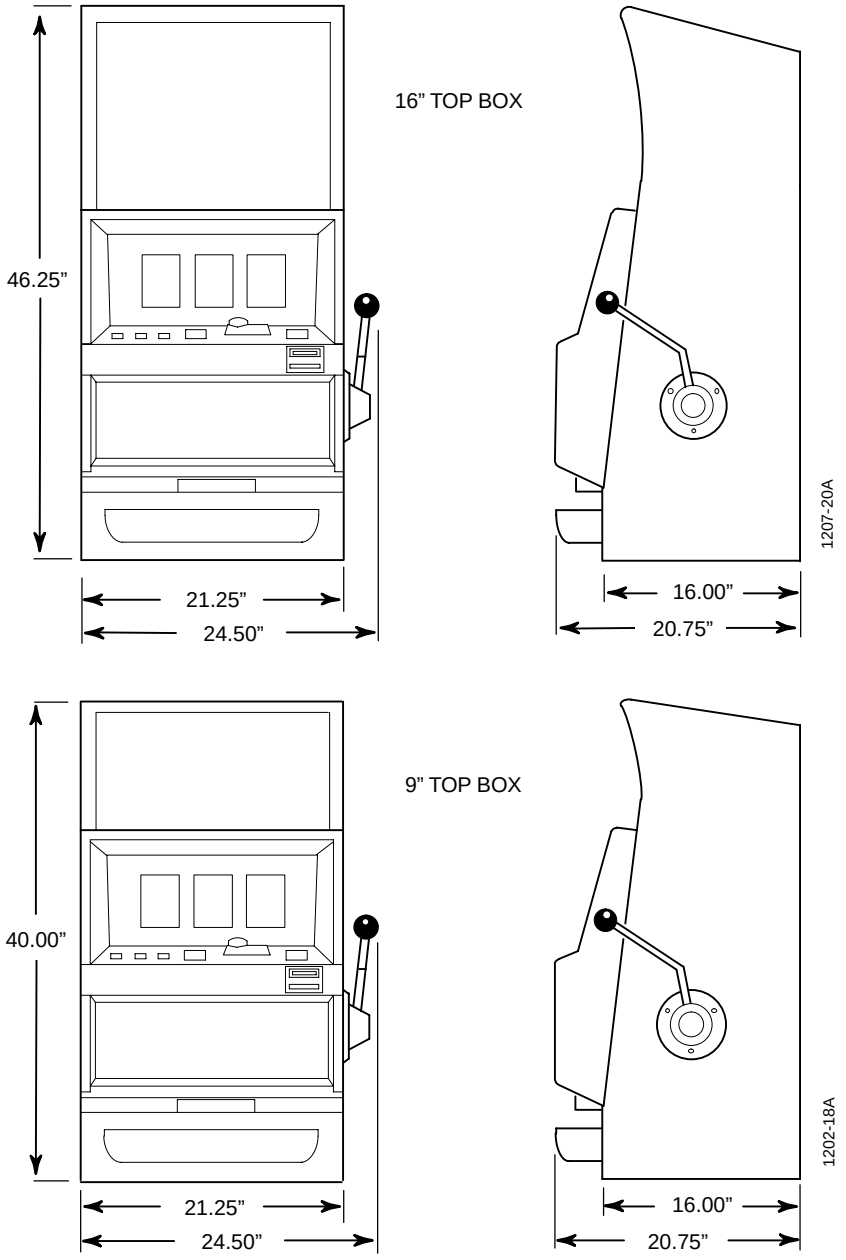


Figure 2-1. Cabinet Dimensions –
S-Plus 16” and 9” Top Box Upright Models

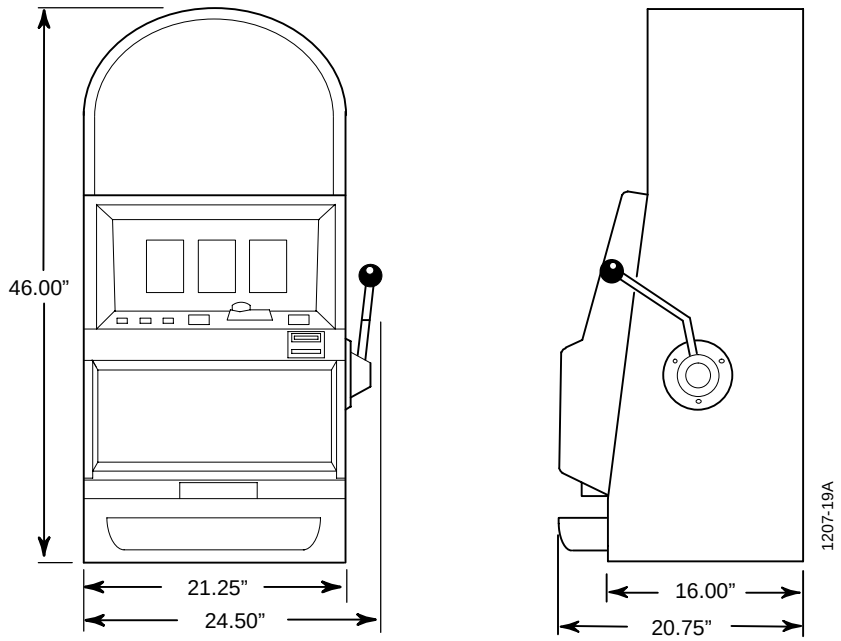


Figure 2-2. Cabinet Dimensions – S-Plus Round Top Upright Model

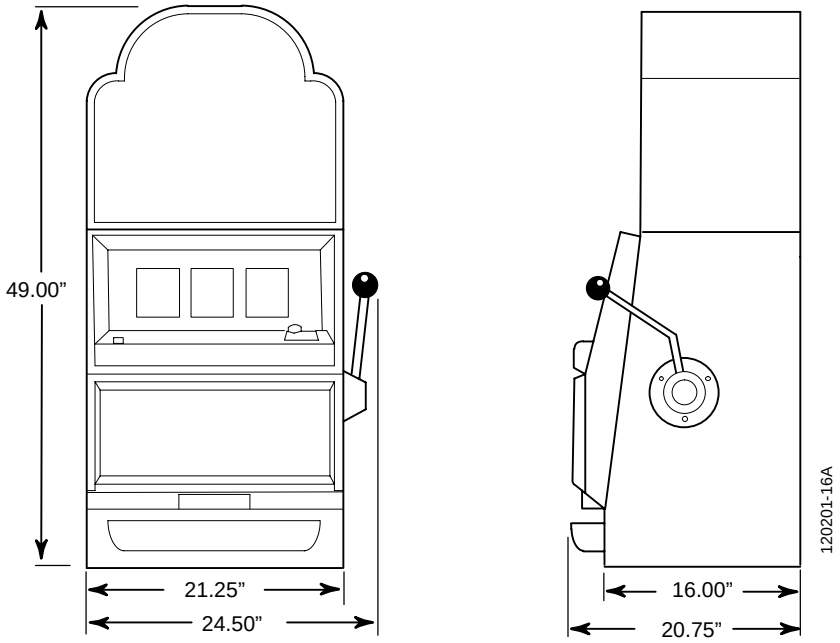


Figure 2-3. Cabinet Dimensions – S-Plus Scalloped Top Upright Model

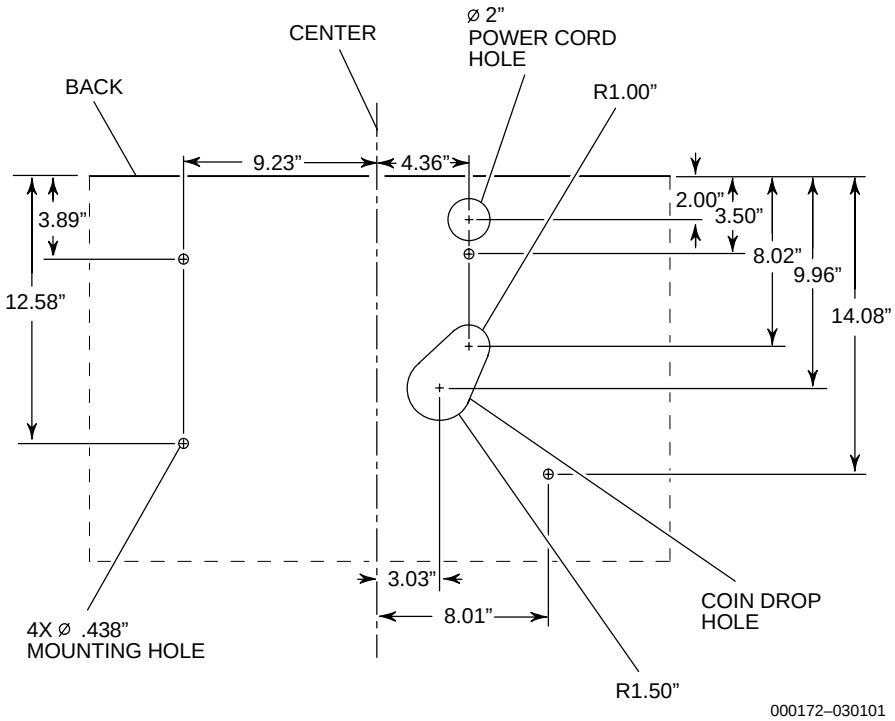


Figure 2-4. Base Dimensions – S-Plus Wide Body with Imbedded Bill Acceptor

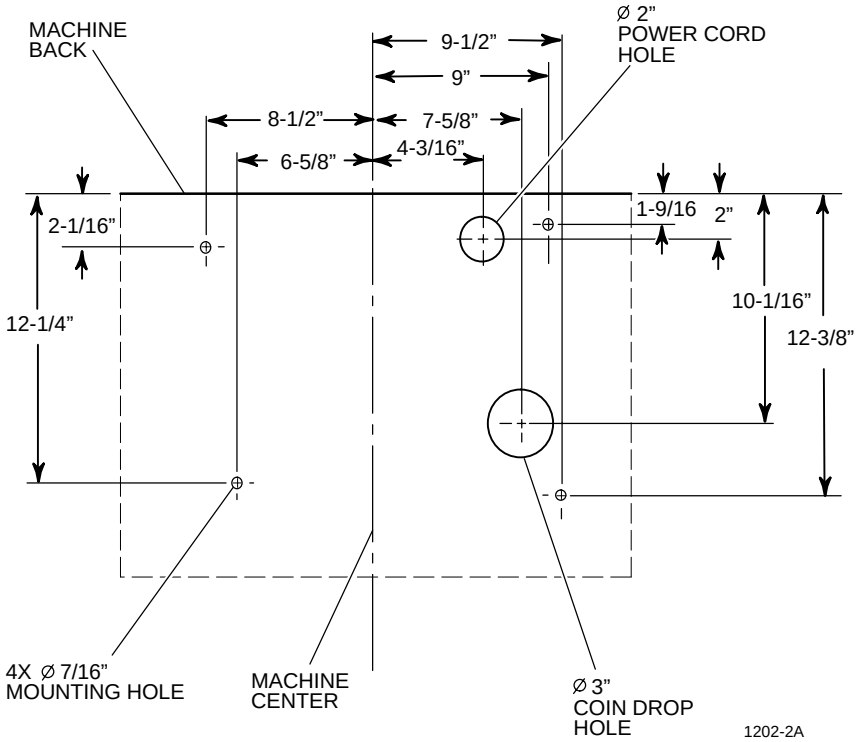


Figure 2-5. Base Dimensions – S-Plus Wide Body without Imbedded Bill Acceptor

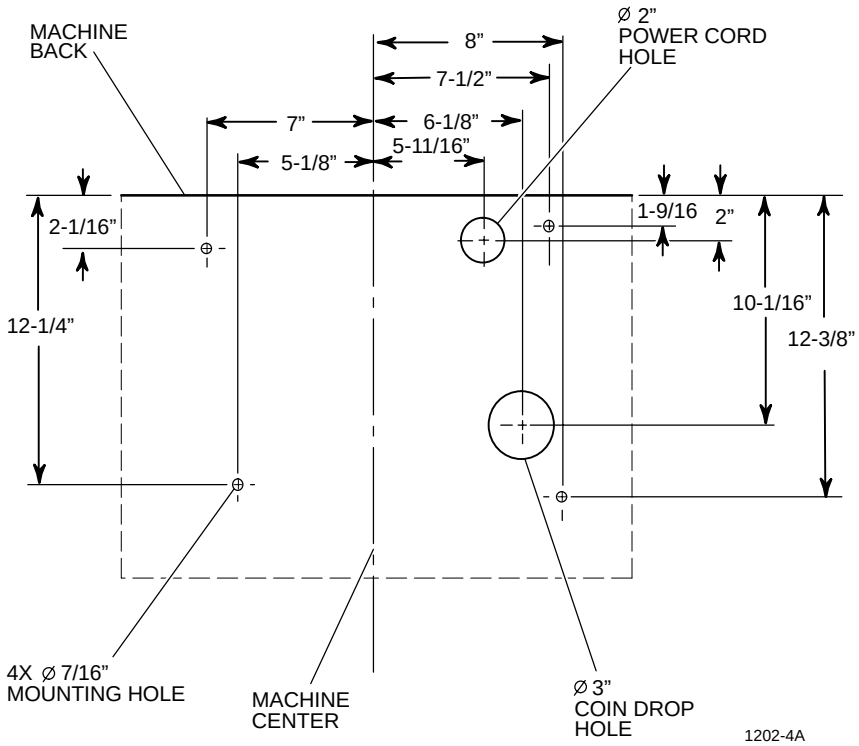
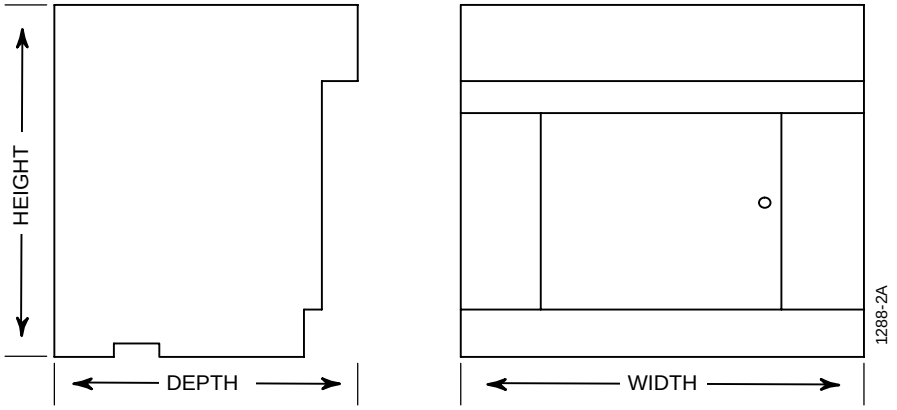


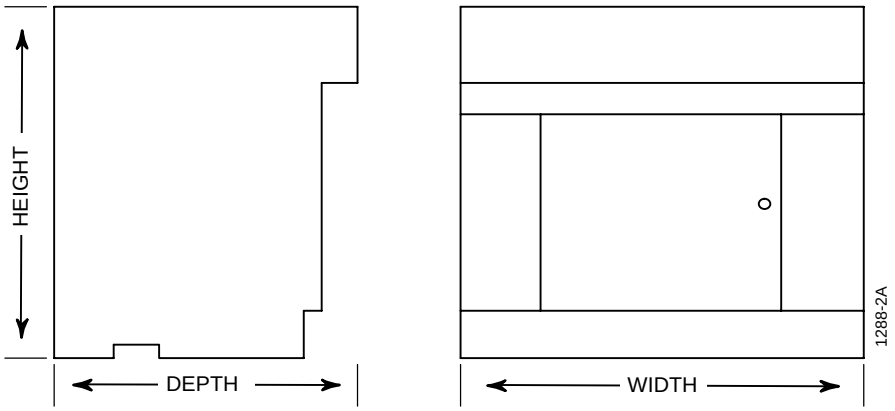
Figure 2-6. Base Dimensions – S-Plus Intermediate Body without Imbedded Bill Acceptor

Table 2-5
Stand Specifications – S-Plus Intermediate Body



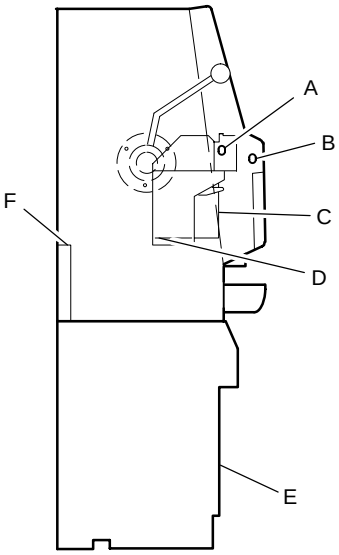
Measurements			Finish Options			
Height	**Width**	**Depth**	**Wood**	**Metal/ Aluminum**	**Loud Bowl**	**Standard Bowl**
22”	25.25”	16”	✓	✓		✓
22”	25.25”	19”	✓			✓
22”	25.25”	21”	✓		✓	
24”	25.25”	16”		✓		✓
26”	24.00”	17”		✓		✓
26”	25.25”	19”	✓			✓
26”	25.25”	21”	✓		✓	
Average Weights:		57 lbs (steel)		26 lbs (aluminum)		47 lbs (wood)

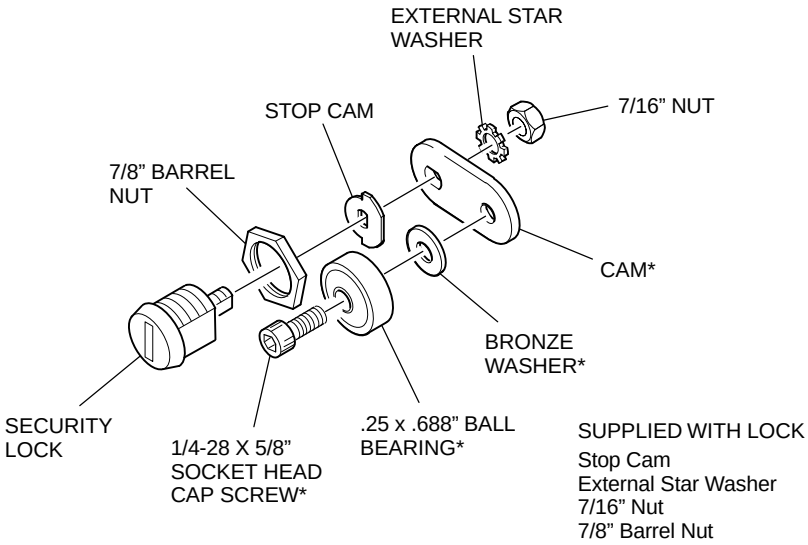
Table 2-6
Stand Specifications – S-Plus Wide Body



Measurements			Finish Options					
Height	**Width**	**Depth**	**S+ Wide**	**S+ Wide IBA**	**Wood**	**Metal/ Aluminum**	**Loud Bowl**	**Standard Bowl**
22”	25.25”	16”	✓			✓		✓
22”	27.00”	16”	✓			✓		✓
22”	27.25”	16”		✓		✓		✓
22”	27.75”	16”	✓	✓	✓	✓		✓
22”	27.75”	19”	✓	✓	✓			✓
22”	27.75”	21”	✓	✓	✓		✓	
24”	27.75”	16”	✓	✓		✓		✓
26”	27.75”	19”	✓	✓	✓			✓
26”	27.75”	21”	✓	✓	✓		✓	
Average Weights**:**			59 lbs (steel)		27 lbs (aluminum)			53 lbs (wood)

Table 2-7
Lock Specifications – S-Plus Upright with Imbedded (DBV) Bill Acceptor

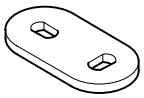




SUPPLIED WITH LOCK
Stop Cam
External Star Washer
7/16" Nut
7/8" Barrel Nut

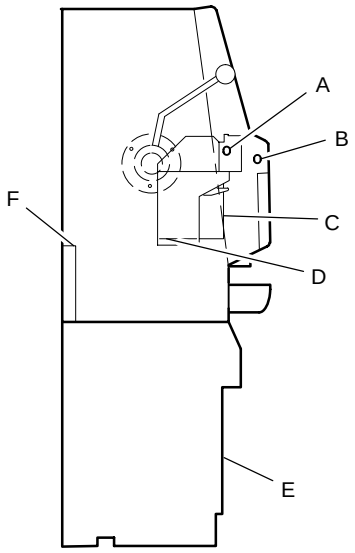
* Kit – Mounting Hardware, IGT p/n 916-433-00

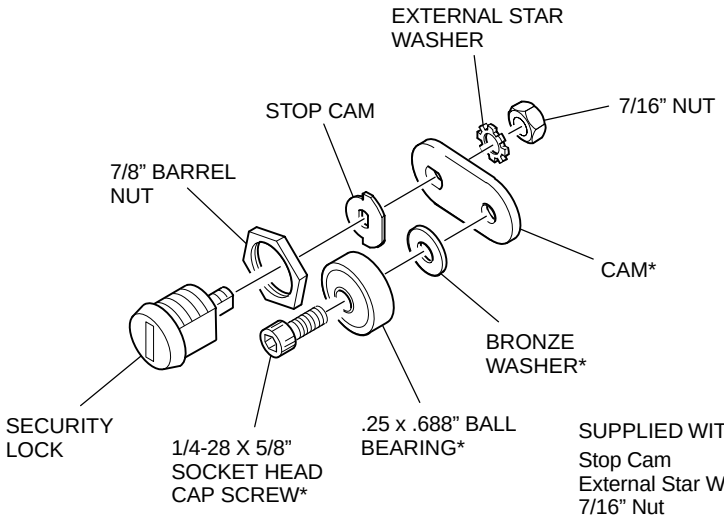
1288-5A

Location		Barrel Length	Key Rotation	Cams	
A	Machine Door	5/8" or 1-1/8" with 1/2" spacer (in hardware kit)	90° RH		p/n 803-078-00 (in hardware kit)
B	Belly Glass Door	5/8" or 1-1/8" with 1/2" spacer (in hardware kit)	90° RH		p/n 803-073-00 (in hardware kit)
C	Bill Acceptor Access Door	5/8" or 1-1/8" with 1/2" spacer (in hardware kit)	90° LH* or RH		p/n 803-081-00 (in hardware kit)
D	Processor Tray	5/8" with 3/8" spacer (in hardware kit)	90° LH*		p/n 803-058-00 (shipped with processor tray kit)
E	Bill Acceptor Cash Box	5/8" or 1-1/8"with 1/16" or 1/8" spacer (none with 1/8" barrel) (in hardware kit)	90° LH*		p/n 803-076-90 (taped to cash box)
F	Stand Drop Door	1-1/8"	90° or 180° RH		p/n 803-019-90 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

Table 2-8
Lock Specifications – S-Plus Upright with Imbedded (WBA) Bill Acceptor

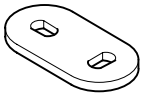
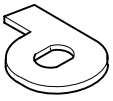




SUPPLIED WITH LOCK
Stop Cam
External Star Washer
7/16" Nut
7/8" Barrel Nut

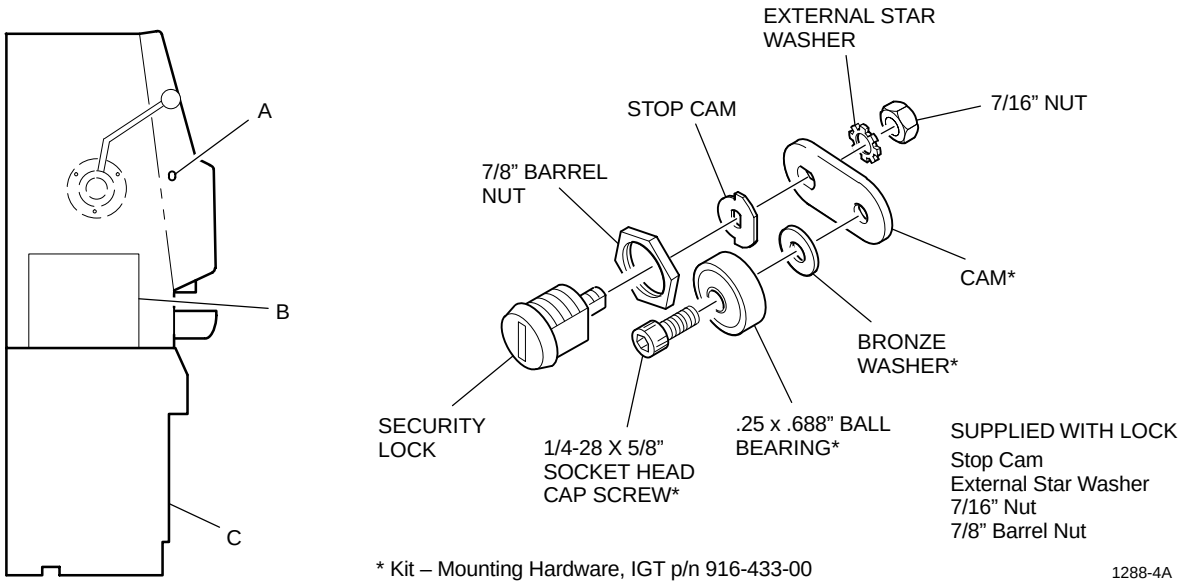
* Kit – Mounting Hardware, IGT p/n 916-433-00

120201-5A

Location		Barrel Length	Key Rotation	Cams	
A	Machine Door	5/8" or 1-1/8" with 1/2" spacer (in hardware kit)	90° RH		p/n 803-078-00 (in hardware kit)
B	Belly Glass Door	5/8" or 1-1/8" with 1/2" spacer (in hardware kit)	90° RH		p/n 803-073-00 (in hardware kit)
C	Bill Acceptor Access Door	5/8" or 1-1/8" with 1/2" spacer (in hardware kit)	90° LH* or RH		p/n 803-081-00 (in hardware kit)
D	Processor Tray	5/8" with 3/8" spacer (in hardware kit)	90° LH*		p/n 803-058-00 (shipped with processor tray kit)
E	Bill Acceptor Cash Box	5/8" or 1-1/8"with 1/16" or 1/8" spacer (none with 1/8" barrel) (in hardware kit)	90° LH*		p/n 803-329-90 (taped to cash box)
F	Stand Drop Door	1-1/8"	90° or 180° RH		p/n 803-019-90 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

Table 2-9
Lock Specifications – S-Plus Upright without Imbedded Bill Acceptor



Location		Barrel Length	Key Rotation	Cams	
A	Machine Door	5/8" or 1-1/8" with 1/2" spacer (in hardware kit)	90° RH		p/n 803-078-00 (in hardware kit)
B	Processor Tray	5/8"	90° RH		p/n 803-058-00 (in hardware kit)
C	Stand Drop Door	1-1/8"	90° or 180° LH* or RH		p/n 803-019-90 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

2.2 S-Plus™ Slant-Top

S-Plus slant-top machines operate from 99 – 128 VAC (115), 198 – 243 VAC (220), or 216 – 264 VAC (240), all at 50/60 Hz line frequency. A main transformer provides power to all components requiring isolated voltages. Tables and figures in this section define the following specifications:

- Electrical Specifications – Table 2-10
- Physical Specifications – Table 2-11
- Main Transformer Taps – Table 2-12
- Cabinet Dimensions – Figure 2-7
- Lock Specifications – Tables 2-13 and 2-14

Table 2-10
Electrical Specifications – S-Plus Slant-Top

Parameter		Specification
Line voltage	115	110 – 126 VAC
	230	220 – 252 VAC
	240	230 – 264 VAC
Power consumption (average)	115 V, 50/60 Hz	230 Watts
		2.7 Amps
		785 BTU/HR
	220 V, 50/60 Hz	255 Watts
		1.6 Amps
		870 BTU/HR
Current protection	F1	24 VAC, 4 Amps
	F2	7-8 VAC, 5 Amps
	F3	100/115 VAC, 6 Amps
		220/240 VAC, 3 Amps/115 VAC, 2 Amps
Line frequency		50/60 Hertz (Hz)

Table 2-11 Physical Specifications – S-Plus Slant-Top			
Characteristic			**Specification**
With bill acceptor	**Height**		52.50” (133.4 cm)
	Width	Base	28.00” (71.1 cm)
		Top box	26.50” (67.3 cm)
	Depth	Base	23.25” (59.1 cm)
		Maximum	33.25” (84.5 cm)
	Weight		370 lbs. (166.5 kg)
Without bill acceptor	**Height**		50.75” (128.9 cm)
	Width	Base	28.00” (71.1 cm)
		Top box	26.50” (67.3 cm)
	Depth	Base	21.25” (54.0 cm)
		Maximum	31.25” (79.4 cm)
	Weight		350 lbs. (157.5 kg)
Twin top box	**Height**		53.00” (134.6 cm)
	Width	Base	28.00” (71.1 cm)
		Top box	26.50” (67.3 cm)
	Depth	Base	42.50” (108.0 cm)
		Maximum	62.50” (158.8 cm)
	Weight		745 lbs. (335.3 kg)
Maximum combustible material weight			10.71 lbs. (4.8 kg)

Note: *The maximum combustible material weight figure is an estimate based on a typical machine configuration, and is for reference only.*

Each machine’s weight may vary depending on the configuration of features and options. It is recommended that a reasonable factor of safety be incorporated to allow for variances in design and manufacturing of the individual products.

The information presented in this manual applies only to IGT equipment and in no way applies to other manufacturers’ equipment in determining the combustible content of machines.

Table 2-12
Main Transformer Taps – S-Plus Slant-Top

Type	Tap #	Transformer Voltage
115/220 VAC PRI	1	115/220 VAC Common (primary)
	2	115 VAC Hot (primary or auto)
	3	220 VAC Hot (primary)
	4	24 VAC Hot
	5	24 VAC Center Tap
	6	24 VAC Return
	7	7-8 VAC Common
	8	7 VAC Hot
	9	8 VAC Hot
115/240 VAC PRI	1	115/240 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	240 VAC Hot (primary)
	4	24 VAC Hot
	5	24 VAC Center Tap
	6	24 VAC Return
	7	7-8 VAC Common
	8	7 VAC Hot
	9	8 VAC Hot

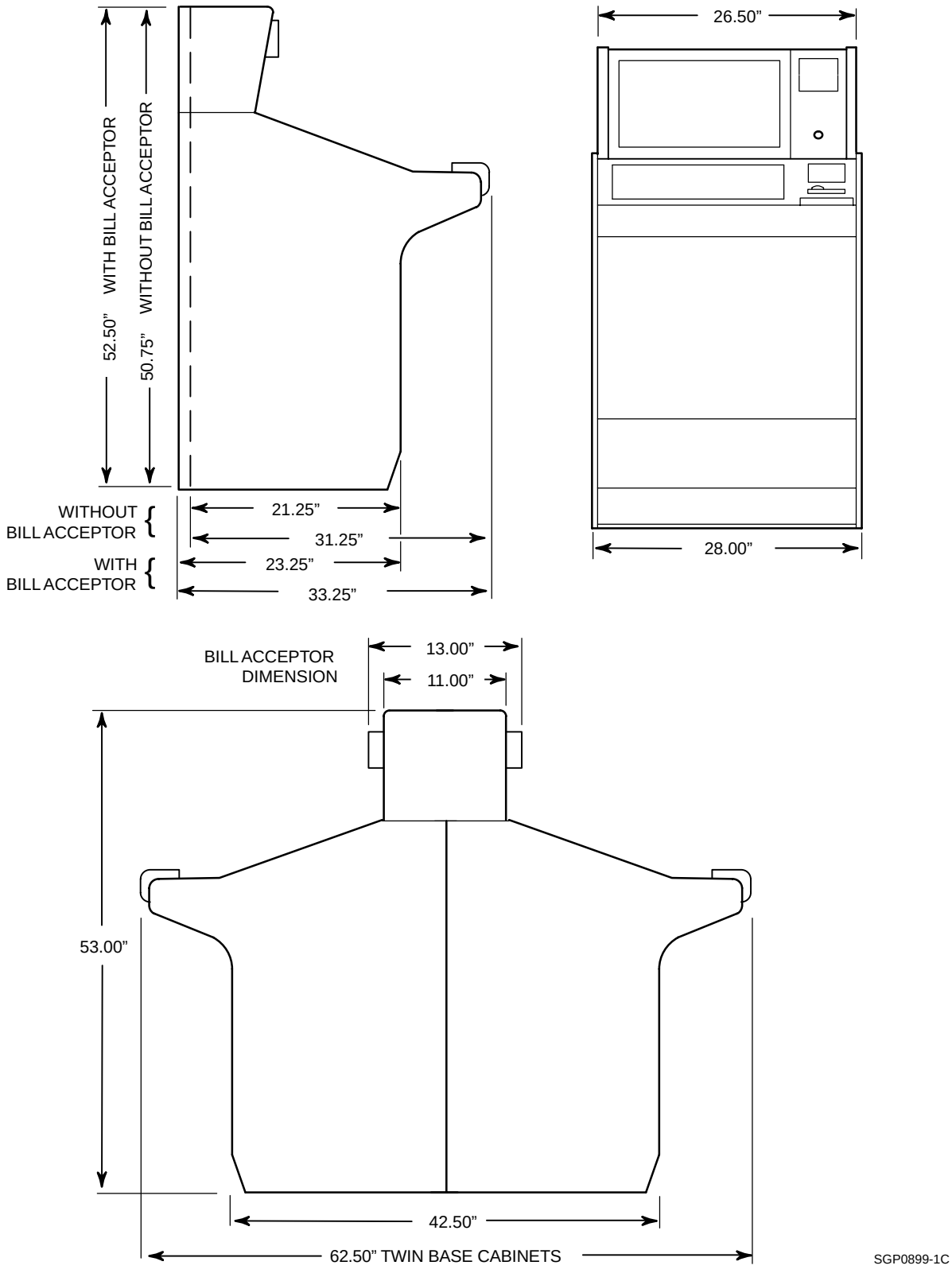
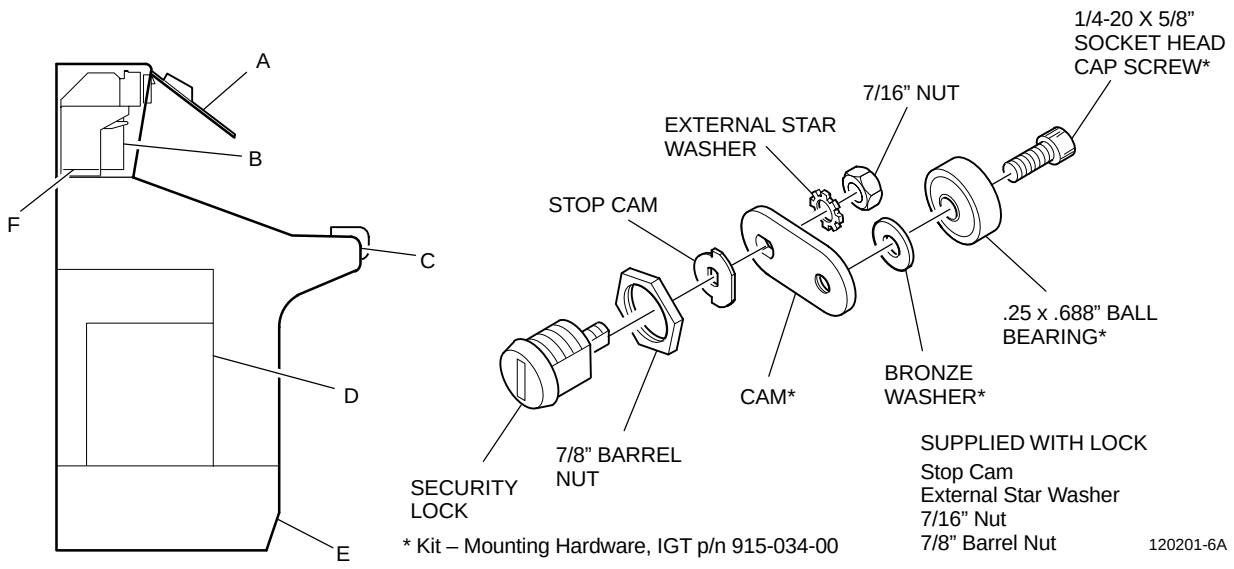
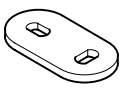


Figure 2-7. Cabinet Dimensions – S-Plus Slant-Top Models

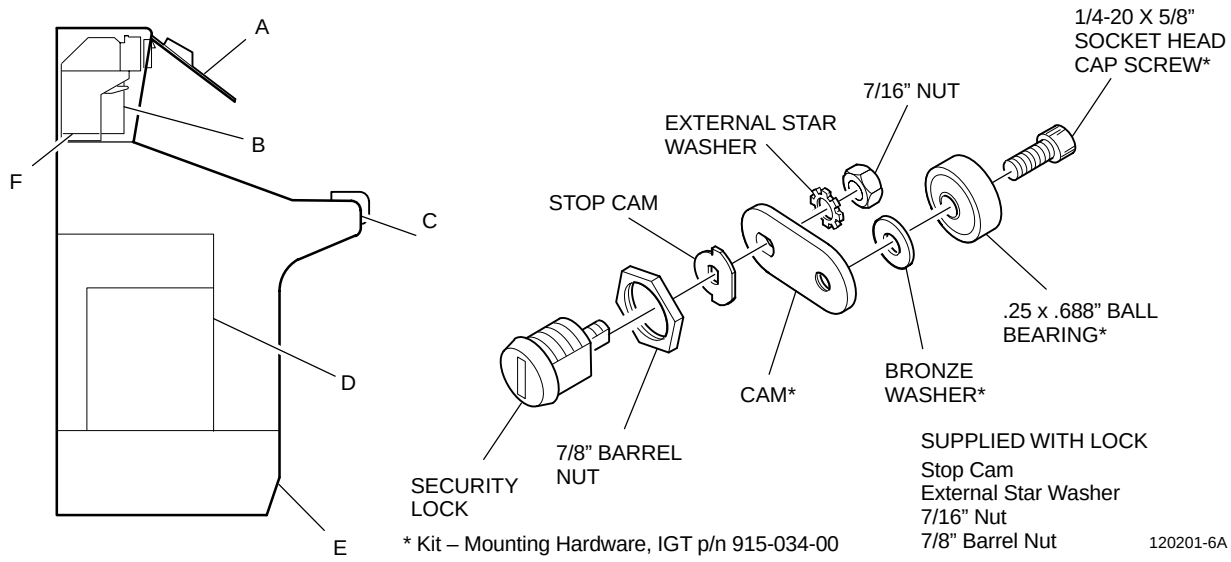
Table 2-13
Lock Specifications – S-Plus Slant-Top with (DBV) Bill Acceptor

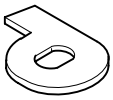
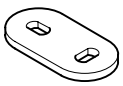


	Location	Barrel Length	Key Rotation	Cams	
A	Bill Acceptor Access Door	5/8" or 1-1/8" with 1/2" spacer	180° RH		p/n 803-048-00 (in top box kit)
B	Bill Box Retaining Lock	5/8" with 1/2" spacer (in hardware kit)	90° RH*		p/n 803-077-00 (ty-rapped to lock module)
C	Bill Acceptor Cash Box Door	5/8" or 1-1/8 with 1/16" or 1/8" spacer (none with 1/8" barrel) (in hardware kit)	90° LH*		p/n 803-329–90 (taped to the cash box)
D	Top Panel	5/8" or 1-1/8" with 1/2" or 1/8"spacer (in hardware kit)	90° RH		p/n 803-048-00 (in hardware kit)
E	Processor Tray (standard lock)	1-1/8"	90° LH* or RH		p/n 803-032-00 (in hardware kit)
	Processor Tray (optical lock)	1-1/8"	90° RH		p/n 803-070-00 (shipped in place)
F	Drop Door	1-1/8"	90° or 180° RH		p/n 803-081-00 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

Table 2-14
Lock Specifications – S-Plus Slant-Top with (WBA) Bill Acceptor



Location		Barrel Length	Key Rotation	Cams	
A	Bill Acceptor Access Door	5/8" or 1-1/8" with 1/2" spacer	180° RH		p/n 803-048-00 (in top box kit)
B	Bill Box Retaining Lock	5/8"	90° LH		p/n 803-322-00 (ty-rapped to lock module)
		1-1/8"	90° LH		p/n 803-322–01 (ty-rapped to lock module)
C	Bill Acceptor Cash Box Door	5/8" or 1-1/8" with 1/16" or 1/8" spacer (none with 1/8" barrel) (in hardware kit)	90° LH*		p/n 803-329-90 (taped to cash box)
D	Top Panel	5/8" or 1-1/8" with 1/2" or 1/8"spacer (in hardware kit)	90° RH		p/n 803-048-00 (in hardware kit)
E	Processor Tray (standard lock)	1-1/8"	90° LH* or RH		p/n 803-032-00 (in hardware kit)
	Processor Tray (optical lock)	1-1/8"	90° RH		p/n 803-046-00 (shipped in place)
F	Drop Door	1-1/8"	90° or 180° RH		p/n 803-081-00 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

Section 3

Player's Edge-Plus® Products

This section contains specifications for Player's Edge-Plus machines. Table 3-1 lists typical machine environmental specifications for all IGT machines.

Tables in individual sections list machine specifications and requirements, and figures in those sections show the dimensions for the following IGT machines:

- **Section 3.1 –** Player's Edge-Plus 13″ Upright
- **Section 3.2 –** Player's Edge-Plus 19″ Upright
- **Section 3.3 –** Player's Edge-Plus 13″ Slant-Top
- **Section 3.4 –** Player's Edge-Plus 13″ Flat-Top
- **Section 3.5 –** Player's Edge-Plus Dual Screen Upright
- **Section 3.6 –** Player's Edge-Plus Dual Screen Slant-Top

Table 3-1
Environmental Specifications – IGT Machines

Characteristic		Performance Requirement
Temperature (Environmental)	Operating	45°F – 100°F (ambient) 10°C – 38°C
	Storage	0°F – 176°F (ambient) -10°C – 80°C
Relative Humidity (Environmental)	Operating	10% to 90% (non-condensing)
	Storage	0% to 95% (non-condensing)

Important: *IGT requires a minimum distance of 6 inches (15.2 cm) between the side walls of any two machines.*

Calculate the number of machines that can safely be installed using the peak current requirements. Do not load a circuit to more than 80% of capacity.

For Example:

When installing machines with power requirements of 2.1 Amps per machine on a 20 Amp circuit

80% of 20 = 16 and 16 ÷ 2.1 = 7.6

This would allow 7 machines on this 20 Amp circuit.

Variations in configuration or the use of supplemental hardware may further restrict the number of machines that can be accommodated per circuit. It is important to verify the current requirements for the specific machines being installed to ensure the circuit breaker is sufficient for the load.

Some jurisdictions limit the current available at the service outlet within the machine. Check with jurisdictional regulating agencies to determine whether the current available at the internal service outlet is restricted.

3.1 Player's Edge-Plus® 13" Upright

Player's Edge-Plus upright machines operate from 99 – 128 VAC (115), 198 – 243 VAC (220), or 216 – 264 VAC (240), all at 50/60 Hz line frequency. A main transformer provides power to all components requiring isolated voltages. Tables and figures in this section define the following specifications:

- Electrical Specifications – Table 3-2
- Physical Specifications – Table 3-3
- Main Transformer Taps – Table 3-4
- Cabinet Dimensions – Figures 3-1 and 3-2
- Base Dimensions – Figures 3-3 and 3-4
- Stand Specifications – Table 3-5
- Lock Specifications – Tables 3-6, 3-7 and 3-8

Table 3-2
Electrical Specifications – Player's Edge-Plus 13" Upright

Characteristic		Performance Requirement
Line voltage taps (primary)	115	99 – 128 VAC
	220	198 – 243 VAC
	240	216 – 264 VAC
Power consumption (average)	Idle, 115 VAC	115 Watts
		1.5 Amps
		392 BTU/HR
	Hopper running, 115 VAC	185 Watts
		2.3 Amps
		631 BTU/HR
	Idle, 220 VAC	120 Watts
		0.8 Amps
		410 BTU/HR
	Hopper running, 220 VAC	190 Watts
		1.4 Amps
		650 BTU/HR
Current protection	F1	24 VAC, 5 Amps
	F2	7 VAC, 5 Amps
	F3	115 VAC, 6 Amps
		220 VAC, 3 Amps
		240 VAC, 3 Amps
Line frequency		50/60 Hertz (Hz)

Table 3-3
Physical Specifications – Player's Edge-Plus
13" Upright

Characteristic		Specification
Height		33.50" (85.1 cm)
Width	With bill acceptor	19.25" (49.0 cm)
	Without bill acceptor	17.00" (43.2 cm)
	Without bill acceptor, with handle	20.00" (50.8 cm)
Depth	Base	16.75" (42.6 cm)
	Maximum	21.50" (54.6 cm)
Weight	With bill acceptor	185 lbs. (83.3 kg)
	Without bill acceptor	155 lbs. (69.8 kg)
Maximum combustible material weight		15.96 lbs. (7.2 kg)

Note: *The maximum combustible material weight figure is an estimate based on a typical machine configuration, and is for reference only.*

Each machine's weight may vary depending on the configuration of features and options. It is recommended that a reasonable factor of safety be incorporated to allow for variances in design and manufacturing of the individual products.

The information presented in this manual applies only to IGT equipment and in no way applies to other manufacturers' equipment in determining the combustible content of machines.

Table 3-4
Main Transformer Taps – Player's Edge-Plus
13" Upright

Type	Tap #	Transformer Voltage
115/220 VAC PRI	1	115/220 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	220 VAC Hot (primary)
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common
115/240 VAC PRI	1	115/240 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	240 VAC Hot (primary)
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common

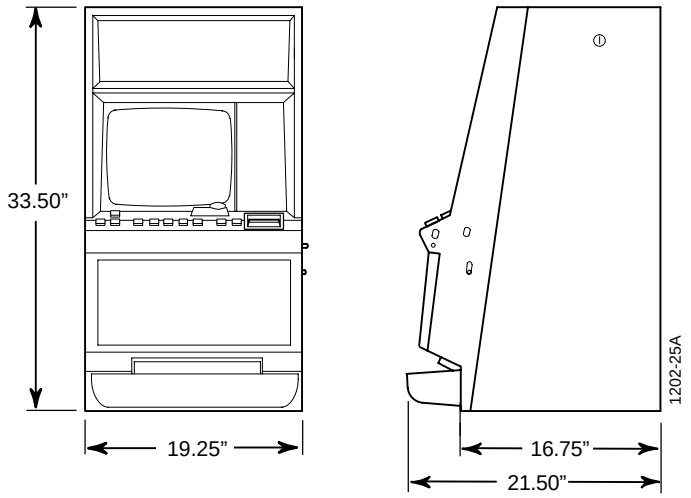


Figure 3-1. Cabinet Dimensions – Player's Edge-Plus 13" Upright Model with Imbedded Bill Acceptor

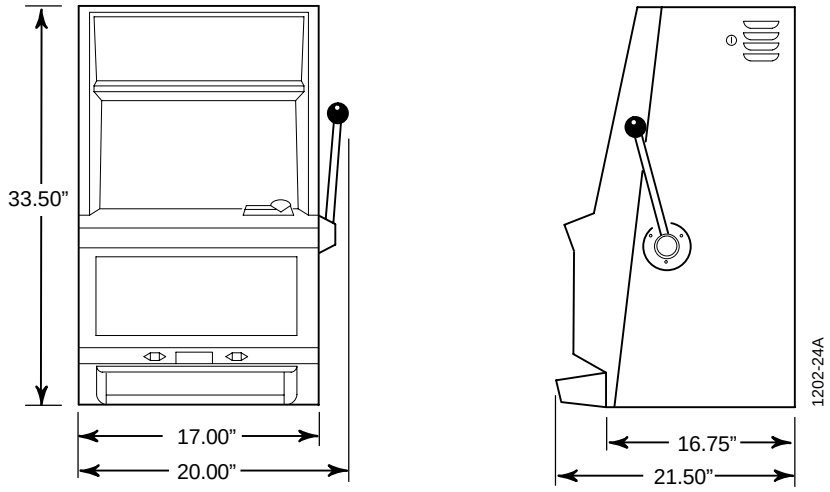


Figure 3-2. Cabinet Dimensions – Player's Edge-Plus 13" Upright Models without Imbedded Bill Acceptor

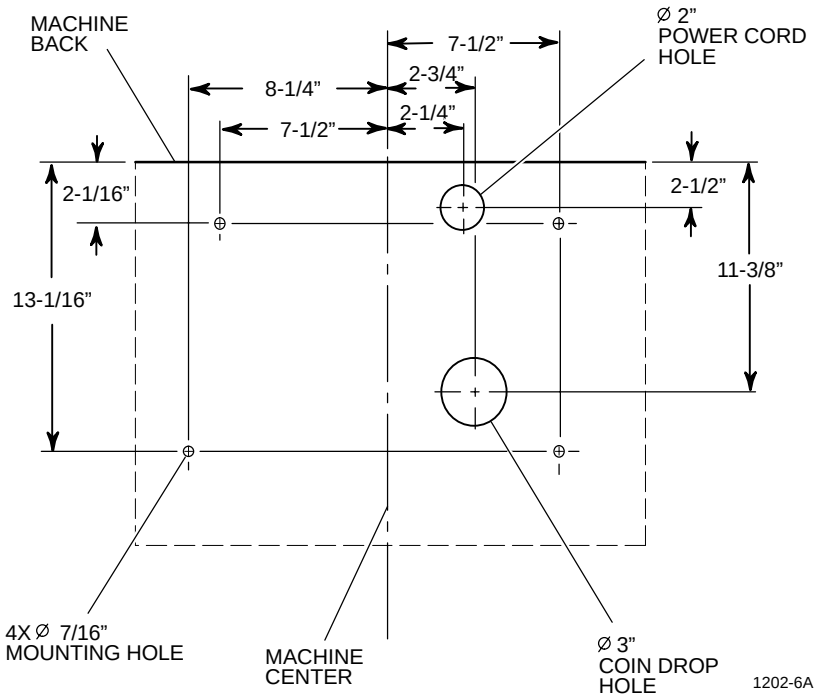


Figure 3-3. Base Dimensions – Player's Edge-Plus 13" with Imbedded Bill Acceptor

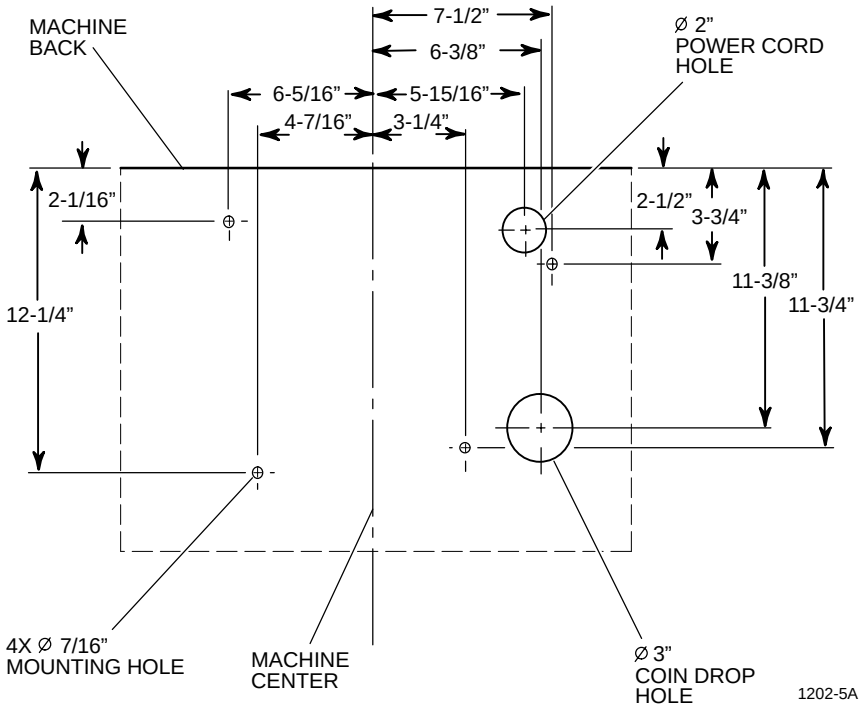
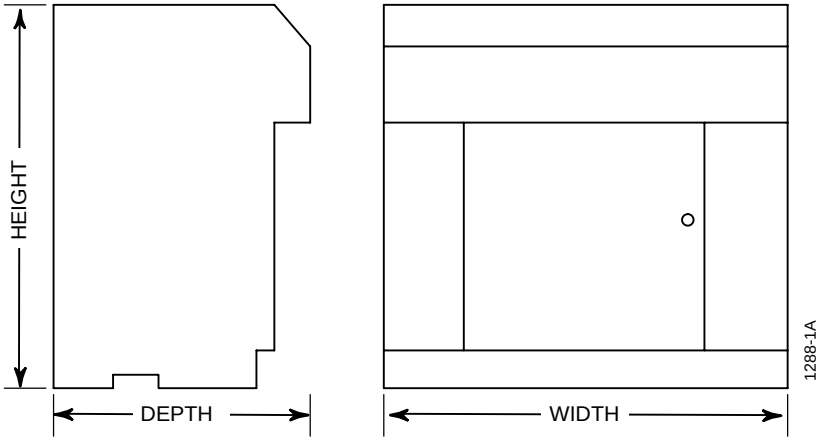


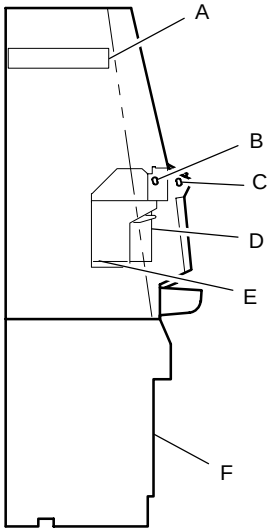
Figure 3-4. Base Dimensions – Player's Edge-Plus 13" without Imbedded Bill Acceptor

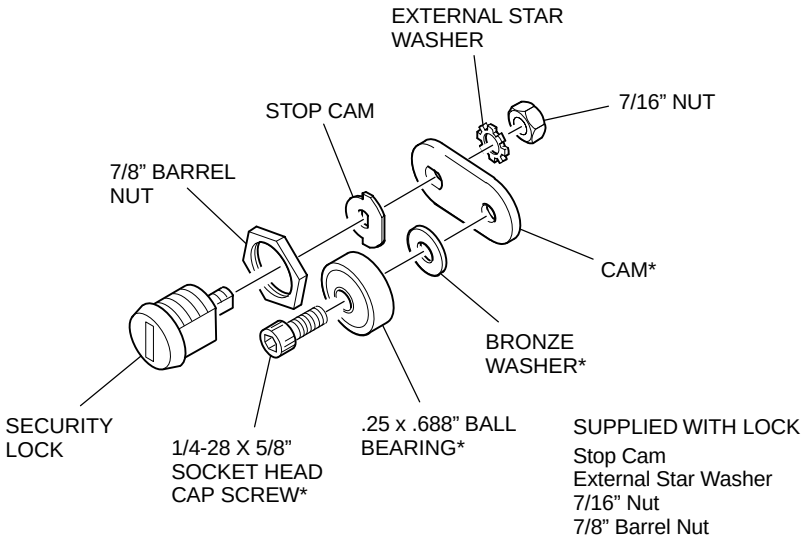
Table 3-5
Stand Specifications – Player's Edge-Plus 13" Upright



Measurements			Finish Options					
Height	**Width**	**Depth**	**PE-Plus**	**PE-Plus IBA**	**Wood**	**Metal/ Aluminum**	**Loud Bowl**	**Standard Bowl**
22"	25.25"	16"	✓			✓		✓
24"	25.25"	16"	✓			✓		✓
26"	23.75"	20.25"	✓		✓		✓	✓
26"	24"	17"	✓			✓		✓
26"	25.75"	17"	✓	✓		✓		✓
26"	25.75"	20.25"	✓	✓	✓		✓	✓
Average Weights:		62 lbs. (steel)		28 lbs. (aluminum)			47 lbs. (wood)	

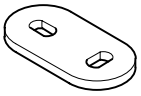
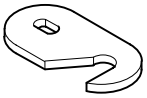
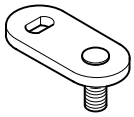
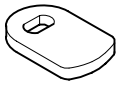
Table 3-6
Lock Specifications – Player's Edge-Plus 13" Upright with Imbedded (DBV) Bill Acceptor





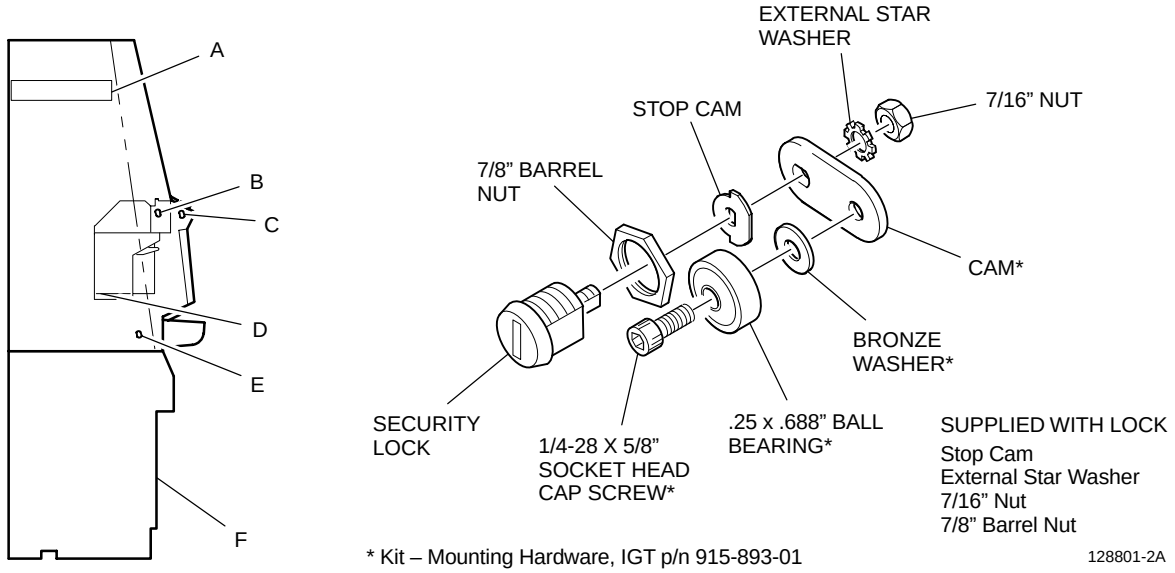
* Kit – Mounting Hardware, IGT p/n 915-893-00

1288-7A

Location		Barrel Length	Key Rotation	Cams	
A	Processor Tray (standard lock)	1-1/8"	90° LH*		p/n 803-032-00 (in hardware kit)
	Processor Tray (optical lock)	1-1/8"	90° LH*		p/n 803-046-00 (shipped in place)
B	Machine Door	5/8" or 1-1/8"with 1/2" or 5/8" spacer (in hardware kit)	90° LH* or RH		p/n 803-081-00 (in hardware kit)
C	Belly Glass Door	5/8" with 1/8" spacer (in hardware kit)	90° LH*		p/n 803-072-00 (in hardware kit)
D	Bill Acceptor Access Door	5/8" (in hardware kit)	90° or 180° LH* or RH		p/n 803-074-00 (with shipping lock)
E	Bill Acceptor Cash Box Door	5/8" or 1-1/8"with 1/16" or 1/8" spacer (none with 1/8" barrel) (in hardware kit)	90° LH*		p/n 803-076-90 (dual lock capability) (taped to the cash box)
F	Stand Drop Door	1-1/8"	90° or 180° RH		p/n 803-019-90 (in hardware kit)

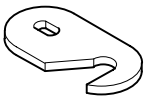
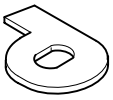
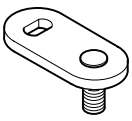
All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

Table 3-7
Lock Specifications – Player's Edge-Plus 13" Upright with Imbedded (WBA) Bill Acceptor



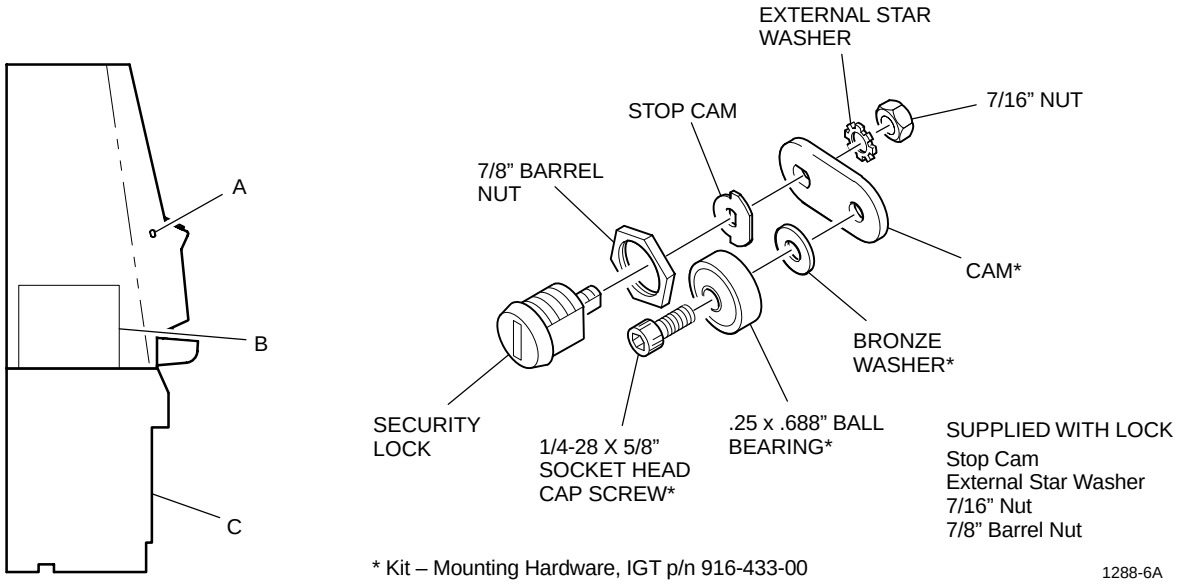
* Kit – Mounting Hardware, IGT p/n 915-893-01

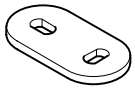
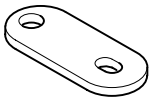
128801-2A

Location		Barrel Length	Key Rotation	Cams	
A	Processor Tray (standard lock)	1-1/8"	90° LH*		p/n 803-032-00 (in hardware kit)
	Processor Tray (optical lock)	1-1/8"	90° LH*		p/n 803-046-00 (shipped in place)
B	Machine Door	5/8" or 1-1/8"with 1/2" or 5/8" spacer (in hardware kit)	90° LH* or RH		p/n 803-330-00 (in hardware kit)
C	Belly Glass Door	5/8" with 1/8" spacer (in hardware kit)	90° LH*		p/n 803-072-00 (in hardware kit)
D	Bill Acceptor Cash Box Door	5/8" or 1-1/8" with 1/16" or 1/8" spacer (none with 1/8" barrel) (in hardware kit)	90° LH*		p/n 803-329-90 (dual lock capability) (taped to cash box)
E	Bill Acceptor Access Door	5/8" (in hardware kit)	90° or 180° LH* or RH		p/n 803-074-00 (with shipping lock)
F	Stand Drop Door	1-1/8"	90° or 180° RH		p/n 803-019-90 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

Table 3-8
Lock Specifications – Player's Edge-Plus 13" Upright without Imbedded Bill Acceptor



Location		Barrel Length	Key Rotation	Cams	
A	Machine Door	5/8" or 1-1/8" with 1/2" or 5/8" spacer (in hardware kit)	90° LH* or RH		p/n 803-081-00 (in hardware kit)
B	Processor Tray	5/8"	90° LH*		p/n 803-032-00 (shipped in place)
C	Stand Drop Door	1-1/8"	90° LH* or RH		p/n 803-019-90 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

3.2 Player's Edge-Plus® 19" Upright

Player's Edge-Plus 19" upright machines operate from 99 – 128 VAC (115), 198 – 243 VAC (220), or 216 – 264 VAC (240), all at 50/60 Hz line frequency. A main transformer provides power to all components requiring isolated voltages. Tables and figures in this section define the following specifications:

- Electrical Specifications – Table 3-9
- Physical Specifications – Table 3-10
- Main Transformer Taps – Table 3-11
- Cabinet Dimensions – Figure 3-5
- Base Dimensions – Figure 3-6
- Stand Specifications – Table 3-12
- Lock Specifications – Table 3-13

Table 3-9
Electrical Specifications – Player's Edge-Plus 19" Upright

Characteristic		Performance Requirement
Line voltage taps (primary)	115	99 – 128 VAC
	220	198 – 243 VAC
	240	216 – 264 VAC
Power consumption (average)	Idle, 115 VAC	120 Watts
		1.5 Amps
		409 BTU/HR
	Hopper running, 115 VAC	190 Watts
		2.4 Amps
		650 BTU/HR
	Idle, 220 VAC	125 Watts
		0.9 Amps
		427 BTU/HR
	Hopper running, 220 VAC	195 Watts
		1.6 Amps
		670 BTU/HR
Current protection	F1	24 VAC, 5 Amps
	F2	7 VAC, 5 Amps
	F3	115 VAC, 3 Amps
		220 VAC, 3 Amps
		240 VAC, 3 Amps
Line frequency		50/60 Hertz (Hz)

Table 3-10 Physical Specifications – Player's Edge-Plus 19" Upright		
Characteristic		**Specification**
Height		44.58" (113.3 cm)
Width		21.25" (54.0 cm)
Depth	Base	22.31" (56.7 cm)
	Maximum	26.29" (66.8 cm)
Weight		245 lbs. (110.3 kg)
Maximum combustible material weight		21 lbs. (9.5 kg)

Note: *The maximum combustible material weight figure is an estimate based on a typical machine configuration, and is for reference only.*

Each machine's weight may vary depending on the configuration of features and options. It is recommended that a reasonable factor of safety be incorporated to allow for variances in design and manufacturing of the individual products.

The information presented in this manual applies only to IGT equipment and in no way applies to other manufacturers' equipment in determining the combustible content of machines.

Table 3-11
Main Transformer Taps – Player's Edge-Plus
19" Upright

Type	Tap #	Transformer Voltage
115/220 VAC PRI	1	115/220 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	220 VAC Hot (primary)
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common
115/240 VAC PRI	1	115/240 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	240 VAC Hot (primary)
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common

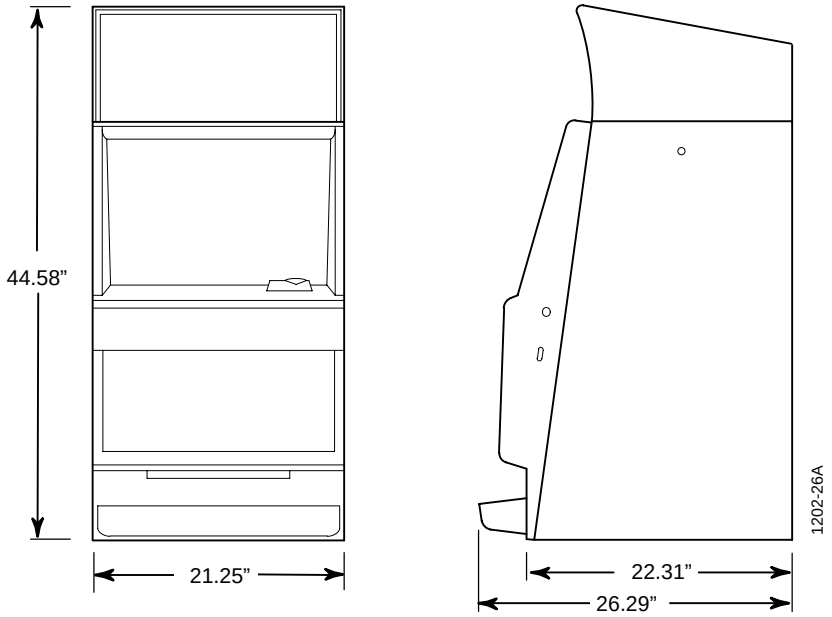


Figure 3-5. Cabinet Dimensions – Player's Edge-Plus 19" Upright Model

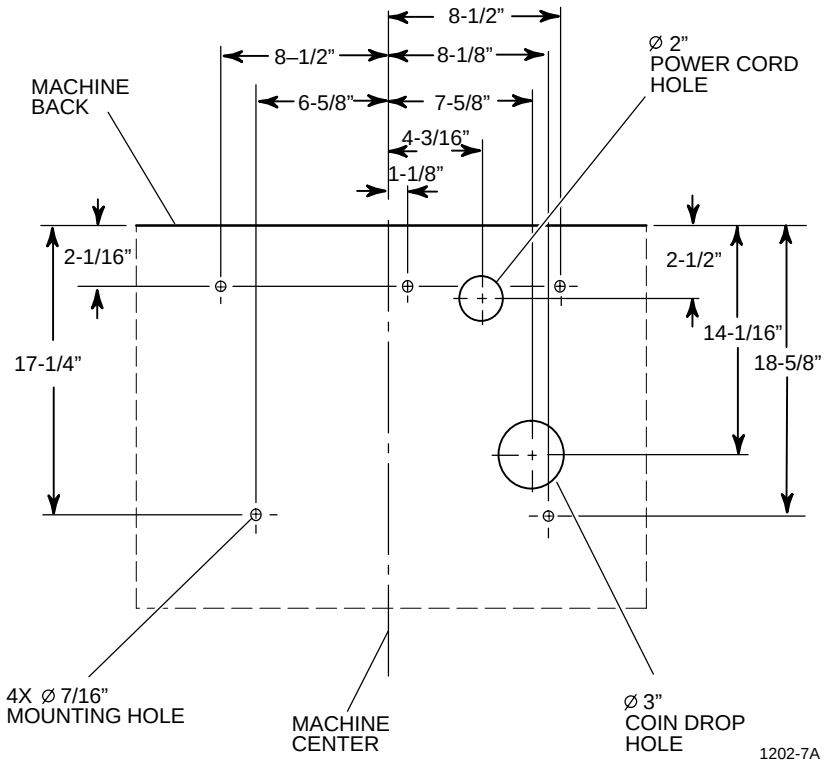
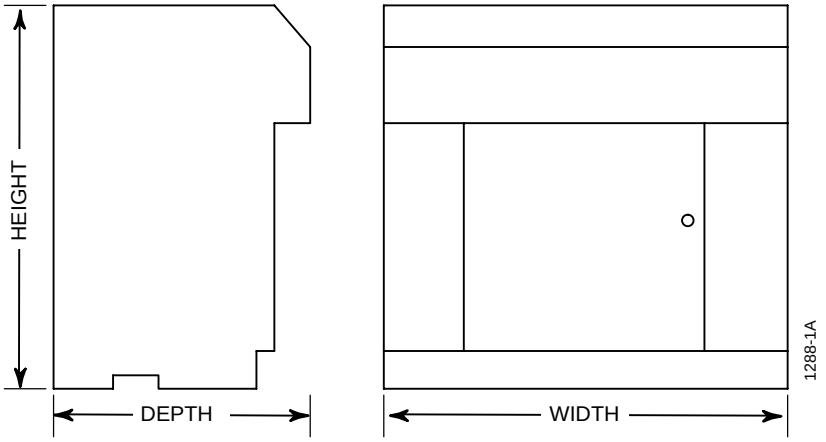


Figure 3-6. Base Dimensions – Player's Edge-Plus 19" Upright

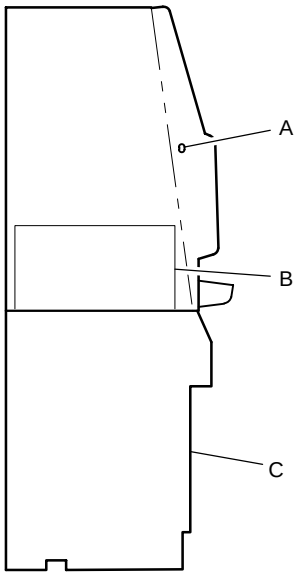
Table 3-12
Stand Specifications – Player's Edge-Plus 19" Upright

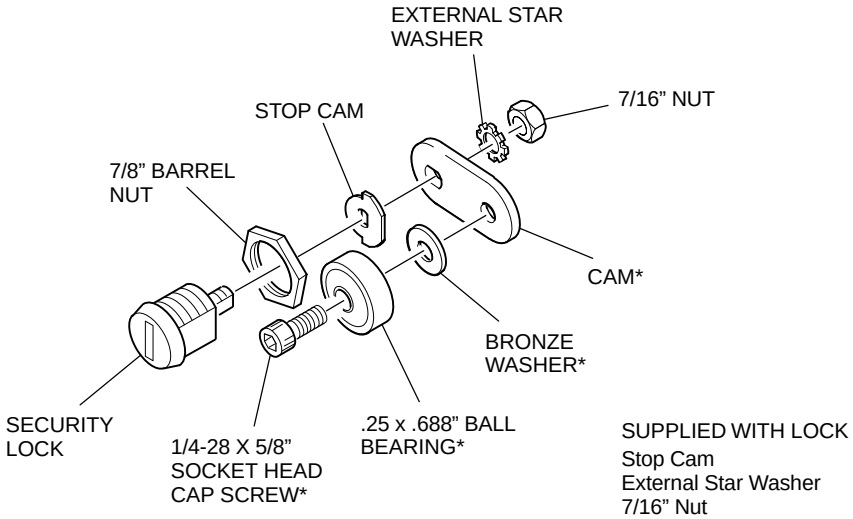


Measurements			Finish Options			
Height	**Width**	**Depth**	**Wood**	**Metal/ Aluminum**	**Loud Bowl**	**Standard Bowl**
22"	27.75"	21"	✓			✓
22"	27.75"	21"		✓		✓
22"	27.75"	24"	✓			✓
22"	27.75"	26"	✓			✓

Average Weights: 65 lbs. (steel) 30 lbs. (aluminum) 57 lbs. (wood)

Table 3-13
Lock Specifications – Player's Edge-Plus 19" Upright

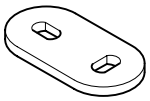




SUPPLIED WITH LOCK
Stop Cam
External Star Washer
7/16" Nut
7/8" Barrel Nut

* Kit – Mounting Hardware, IGT p/n 916-433-00

1288-9A

Location		Barrel Length	Key Rotation	Cams	
A	Machine Door	5/8" or 1-1/8"	90° or 180° LH* or RH		p/n 803-081-00 (in hardware kit)
B	Processor Tray	7/8"	90° LH*		p/n 803-078-00 (in hardware kit)
C	Stand Drop Door	1-1/8"	90° or 180° LH* or RH		p/n 803-019-90 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

3.3 Player's Edge-Plus® 13" Slant-Top

Player's Edge-Plus 13" slant-top machines operate from 99 – 128 VAC (115), 198 – 243 VAC (220), or 216 – 264 VAC (240), all at 50/60 Hz line frequency. A main transformer provides power to all components requiring isolated voltages. Tables and figures in this section define the following specifications:

- Electrical Specifications – Table 3-14
- Physical Specifications – Table 3-15
- Main Transformer Taps – Table 3-16
- Cabinet Dimensions – Figure 3-7
- Lock Specifications – Tables 3-17 and 3-18

Table 3-14
Electrical Specifications – Player's Edge-Plus 13" Slant-Top

Characteristic		Performance Requirement
Line voltage taps (primary)	115	99 – 128 VAC
	220	198 – 243 VAC
	240	216 – 264 VAC
Power consumption (average)	Idle, 100/115 VAC	81 Watts
		1.0 Amps
		276 BTU/HR
	Hopper running, 100/115 VAC	155 Watts
		2.0 Amps
		315 BTU/HR
	Idle, 220/240 VAC	100 Watts
		0.62 Amps
		341 BTU/HR
	Hopper running, 220/240 VAC	180 Watts
		1.3 Amps
		614 BTU/HR
Current protection	F1	24 VAC, 5 Amps
	F2	7 VAC, 5 Amps
	F3	115 VAC, 6 Amps
		220 VAC, 3 Amps
		240 VAC, 3 Amps
Line frequency		50/60 Hertz (Hz)

Table 3-15
Physical Specifications – Player's Edge-Plus
13" Slant-Top

Characteristic			Specification
With bill acceptor	**Height**		52.50" (133.4 cm)
	Width	Base	28.00" (71.12cm)
		Top box	26.50" (67.3 cm)
	Depth	Base	23.25" (59.1 cm)
		Maximum	33.25" (84.5 cm)
	Weight		370 lbs. (166.5 kg)
Without bill acceptor	**Height**		50.75" (128.9 cm)
	Width	Base	28.00" (71.1 cm)
		Top box	26.50" (67.3 cm)
	Depth	Base	21.25" (54.0 cm)
		Maximum	31.25" (79.4 cm)
	Weight		350 lbs. (157.5 kg)
Twin top box	**Height**		53.00" (134.6 cm)
	Width	Base	28.00" (71.1 cm)
		Top box	26.50" (67.3 cm)
	Depth	Base	42.50" (108.0 cm)
		Maximum	62.50" (158.8 cm)
	Weight		745 lbs. (335.3 kg)
Maximum combustible material weight			10.60 lbs. (4.8 kg)

Note: *The maximum combustible material weight figure is an estimate based on a typical machine configuration, and is for reference only.*

Each machine's weight may vary depending on the configuration of features and options. It is recommended that a reasonable factor of safety be incorporated to allow for variances in design and manufacturing of the individual products.

The information presented in this manual applies only to IGT equipment and in no way applies to other manufacturers' equipment in determining the combustible content of machines.

Table 3-16
Main Transformer Taps – Player's Edge-Plus
13" Slant-Top

Type	Tap #	Transformer Voltage
115/220 VAC PRI	1	115/220 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	220 VAC Hot (primary)
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return (isolation)
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common
115/240 VAC PRI	1	115/240 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	240 VAC Hot (primary
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common

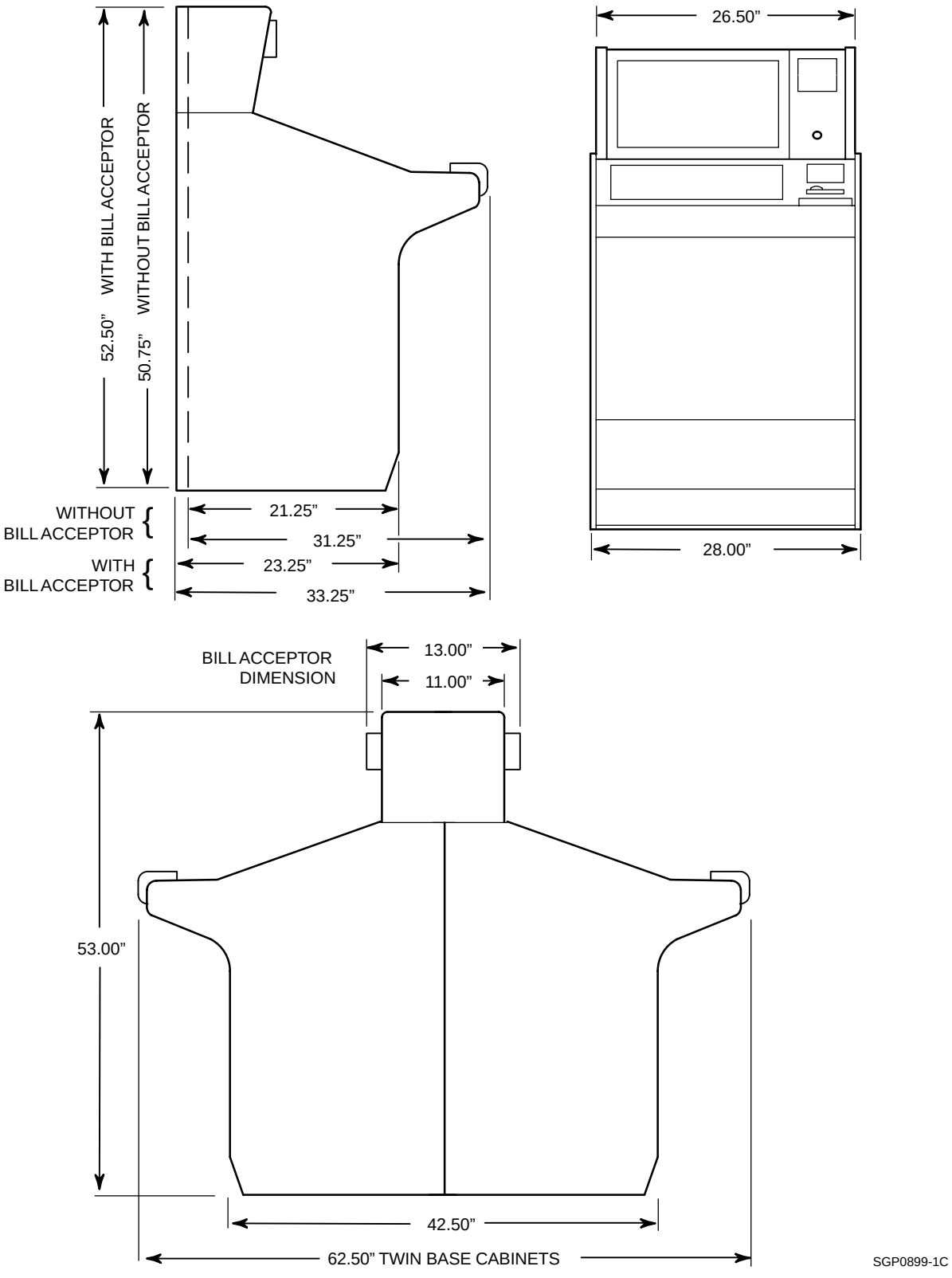
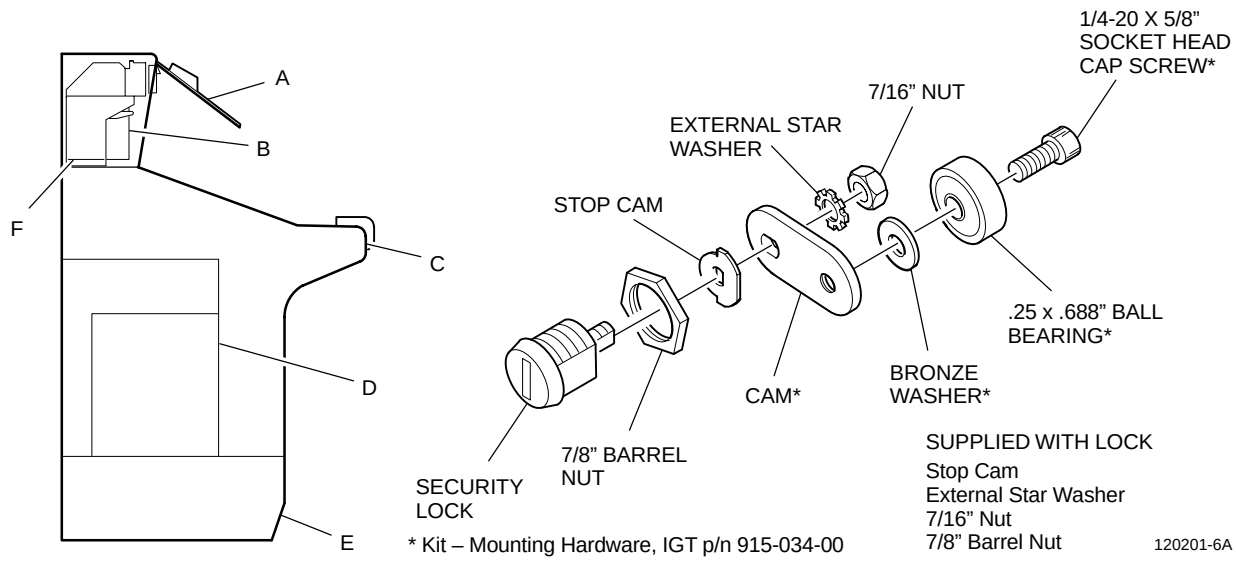
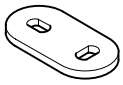


Figure 3-7. Cabinet Dimensions – Player's Edge-Plus 13" Slant-Top Models

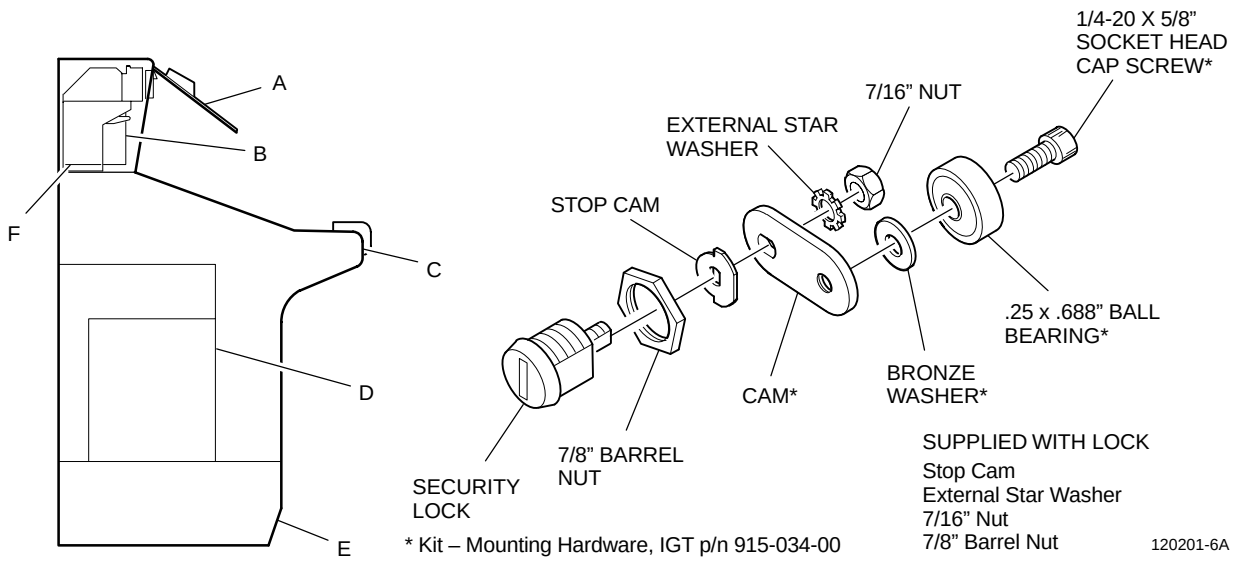
Table 3-17
Lock Specifications – Player's Edge-Plus (DBV) 13" Slant-Top

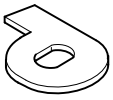
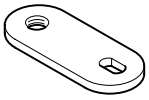
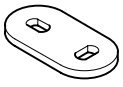


	Location	Barrel Length	Key Rotation	Cams	
A	Bill Acceptor Access Door	5/8" or 1-1/8" with 1/2" spacer	180° RH		p/n 803-048-00 (in top box kit)
B	Bill Box Retaining Lock	5/8" with 1/2" spacer (in hardware kit)	90° RH		p/n 803-077-00 (ty-rapped to lock module)
C	Bill Acceptor Cash Box Door	5/8" or 1-1/8" with 1/16" or 1/8" spacer (none with 1/8" barrel) (in hardware kit)	90° LH*		p/n 803-076-90 (dual lock capability) 2 cams are taped to validator power supply; 2 cams are taped to extra bill drop box
D	Top Panel	5/8" or 1-1/8" with 1/2" or 1/8"spacer (in hardware kit)	90° RH		p/n 803-048-00 (in hardware kit)
E	Processor Tray (standard lock)	1-1/8"	90° LH* or RH		p/n 803-032-00 (in hardware kit)
	Processor Tray (optical lock)	1-1/8"	90° RH		p/n 803-046-00 (shipped in place)
F	Drop Door	1-1/8"	90° or 180° RH		p/n 803-081-00 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

Table 3-18
Lock Specifications – Player's Edge-Plus (WBA) 13" Slant-Top



	Location	Barrel Length	Key Rotation	Cams	
A	Bill Acceptor Access Door	5/8" or 1-1/8" with 1/2" spacer	180° RH		p/n 803-048-00 (in top box kit)
B	Bill Box Retaining Lock	5/8" with 1/2" spacer (in hardware kit)	90° RH		p/n 803-077-00 (ty-rapped to lock module)
C	Bill Acceptor Cash Box Door	5/8" or 1-1/8" with 1/16" or 1/8" spacer (none with 1/8" barrel) (in hardware kit)	90° LH*		p/n 803-329-90 (dual lock capability) (taped to cash box)
D	Top Panel	5/8" or 1-1/8" with 1/2" or 1/8"spacer (in hardware kit)	90° RH		p/n 803-048-00 (in hardware kit)
E	Processor Tray (standard lock)	1-1/8"	90° LH* or RH		p/n 803-032-00 (in hardware kit)
	Processor Tray (optical lock)	1-1/8"	90° RH		p/n 803-046-00 (shipped in place)
F	Drop Door	1-1/8"	90° or 180° RH		p/n 803-081-00 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

3.4 Player's Edge-Plus® 13" Flat-Top

Player's Edge-Plus 13" flat-top machines operate from 99 – 128 VAC (115), 198 – 243 VAC (220), or 216 – 264 VAC (240), all at 50/60 Hz line frequency. A main transformer provides power to all components requiring isolated voltages. Tables and figures in this section define the following specifications:

- Electrical Specifications – Table 3-19
- Physical Specifications – Table 3-20
- Main Transformer Taps – Table 3-21
- Cabinet Dimensions – Figure 3-8
- Lock Specifications – Tables 3-22 and 3-23

Table 3-19
Electrical Specifications – Player's Edge-Plus 13" Flat-Top

Characteristic		Performance Requirement
Line voltage taps (primary)	115	99 – 128 VAC
	220	198 – 243 VAC
	240	216 – 264 VAC
Power consumption (average)	Idle, 100/115 VAC	81 Watts
		1.0 Amps
		276 BTU/HR
	Hopper running, 100/125 VAC	155 Watts
		2.0 Amps
		315 BTU/HR
	Idle, 220/240 VAC	100 Watts
		0.62 Amps
		341 BTU/HR
	Hopper running, 220/240 VAC	180 Watts
		1.3 Amps
		614 BTU/HR
Current protection	F1	24 VAC, 5 Amps
	F2	7 VAC, 5 Amps
	F3	115 VAC, 6 Amps
		220 VAC, 3 Amps
		240 VAC, 3 Amps
Line frequency		50/60 Hertz (Hz)

Table 3-20 Physical Specifications – Player's Edge-Plus 13" Flat-Top		
Characteristic		**Specification**
Height		23.50" (59.7 cm)
Width	Top	26.00" (66.0 cm)
	Enclosure	24.13" (61.3 cm)
Depth	Top, maximum	15.75" (40.0 cm)
	Enclosure, base	12.25" (31.1 cm)
	Enclosure, maximum	13.75" (34.9 cm)
Weight	Without enclosure, with IBA	160 lbs. (72.0 kg)
	Without enclosure, without IBA	150 lbs. (67.5 kg)
Maximum combustible material weight		11.64 lbs. (5.2 kg)

Note: *The maximum combustible material weight figure is an estimate based on a typical machine configuration, and is for reference only.*

Each machine's weight may vary depending on the configuration of features and options. It is recommended that a reasonable factor of safety be incorporated to allow for variances in design and manufacturing of the individual products.

The information presented in this manual applies only to IGT equipment and in no way applies to other manufacturers' equipment in determining the combustible content of machines.

Table 3-21
Main Transformer Taps – Player's Edge-Plus
13" Flat-Top

Type	Tap #	Transformer Voltage
115/220 VAC PRI	1	115/220 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	220 VAC Hot (primary)
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return (isolation)
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common
115/240 VAC PRI	1	115/240 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	240 VAC Hot (primary
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common

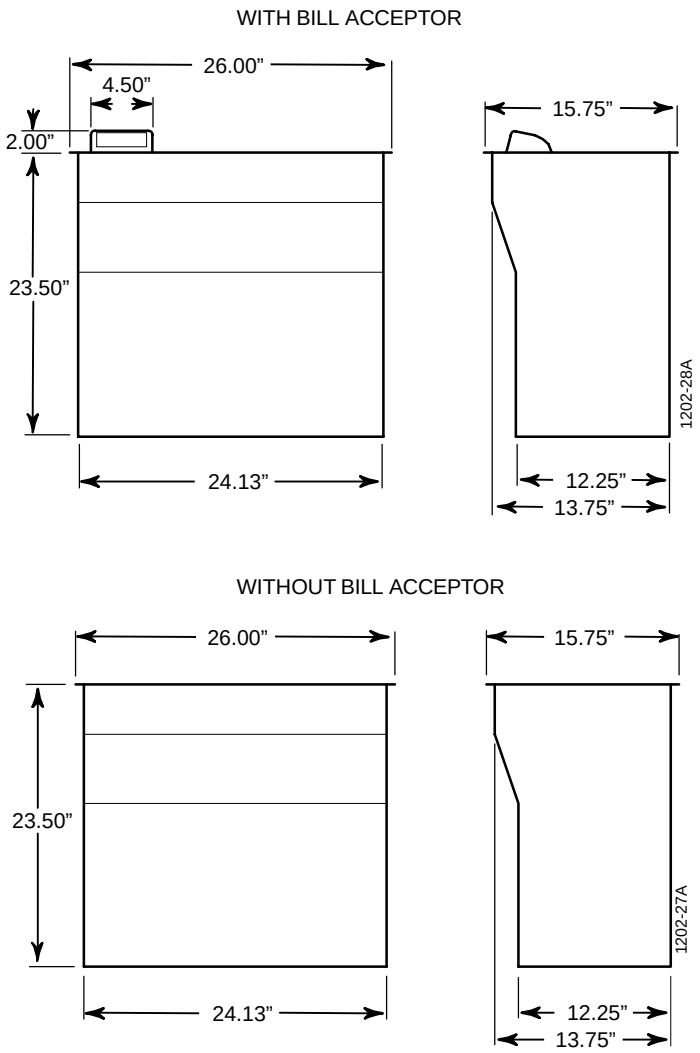
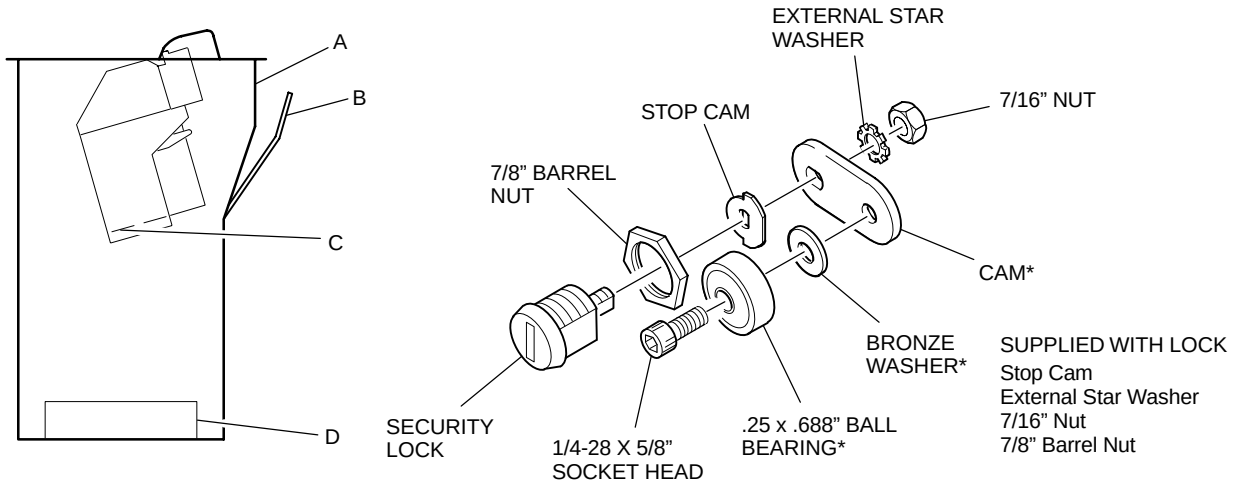


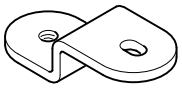
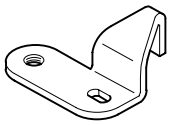
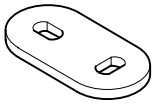
Figure 3-8. Cabinet Dimensions – Player's Edge-Plus 13" Flat-Top Models

Table 3-22
Lock Specifications – Player's Edge Plus 13" Flat-Top with Imbedded Bill Acceptor



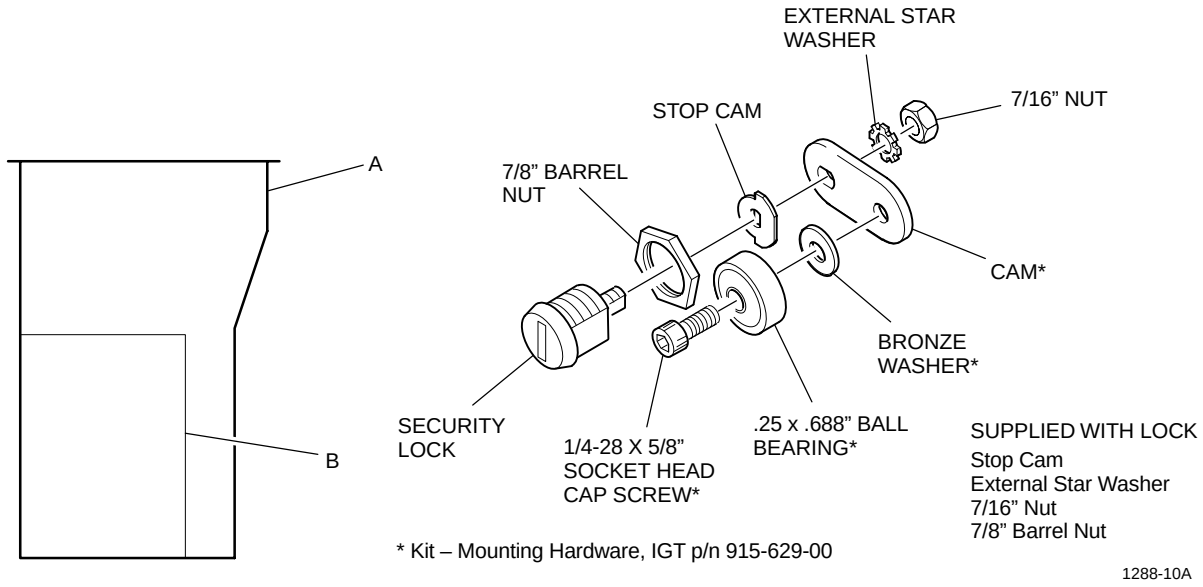
* Kit – Mounting Hardware, IGT p/n 915-629-00

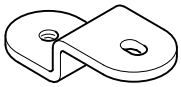
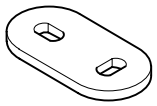
120201-10A

	Location	Barrel Length	Key Rotation	Cams	
A	Top Panel	5/8" or 1-1/8" with 1/2" spacer (in hardware kit)	90° RH		p/n 803-042-00 (in hardware kit)
					p/n 803-312-00 optional high security cam (in hardware kit)
B	Bill Acceptor Access Door	5/8" or 1-1/8" with 1/2" spacer (in hardware kit)	90° LH or 180° RH		p/n 803-048-00 (in hardware kit)
C	Bill Acceptor Cash Box Door	5/8" or 1-1/8" with 1/16" or 1/8" spacer (none with 1/8" barrel) (in hardware kit)	90° LH*		p/n 803-076-90 (shipped in enclosure)
D	Processor Tray (standard lock)	1-1/8"	90° LH* or RH		p/n 803-032-00 (in hardware kit)
	Processor Tray (optical lock)	1-1/8"	90° RH		p/n 803-046-00 (shipped in place)
	Drop Door The drop door is located in the lower portion of the cabinet. Locations vary depending on cabinet.	1-1/8"	90° or 180° RH		p/n 803-081-00 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

Table 3-23
Lock Specifications – Player's Edge-Plus 13" Flat-Top without Imbedded Bill Acceptor



Location		Barrel Length	Key Rotation	Cams	
A	Top Panel	5/8" or 1-1/8" with 1/2" spacer (in hardware kit)	90° RH		p/n 803-042-00 (in hardware kit)
B	Processor Tray (standard lock)	1-1/8"	90° LH* or RH		p/n 803-032-00 (in hardware kit)
	Processor Tray (optical lock)	1-1/8"	90° RH		p/n 803-046-00 (shipped in place)
	Drop Door The drop door is located in the lower portion of the cabinet. Locations vary depending on cabinet.	1-1/8"	90° or 180° RH		p/n 803-081-00 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

3.5 Player's Edge-Plus® Dual Screen Upright

Player's Edge-Plus dual screen upright machines operate from 99 – 128 VAC (115), 198 – 243 VAC (220), or 216 – 264 VAC (240), all at 50/60 Hz line frequency. A main transformer provides power to all components requiring isolated voltages. Tables and figures in this section define the following specifications:

- Electrical Specifications – Table 3-24
- Physical Specifications – Table 3-25
- Main Transformer Taps – Table 3-26
- Cabinet Dimensions – Figure 3-9
- Lock Specifications – Table 3-27

Table 3-24
Electrical Specifications – Player's Edge-Plus
Dual Screen Upright

Characteristic		Performance Requirement
Line voltage taps (primary)	115	99 – 128 VAC
	220	198 – 243 VAC
	240	216 – 264 VAC
Power consumption (average)	Idle, 115 VAC	150 Watts
		1.9 Amps
		512 BTU/HR
	Hopper running, 115 VAC	205 Watts
		2.5 Amps
		700 BTU/HR
	Idle, 220 VAC	155 Watts
		1.0 Amps
		530 BTU/HR
	Hopper running, 220 VAC	210 Watts
		1.6 Amps
		720 BTU/HR
Current protection	F1	24 VAC, 5 Amps
	F2	7 VAC, 5 Amps
	F3	115 VAC, 3 Amps
		220 VAC, 3 Amps
		240 VAC, 3 Amps
Line frequency		50/60 Hertz (Hz)

Table 3-25 Physical Specifications – Player's Edge-Plus Dual Screen Upright		
Characteristic		**Specification**
Height		74.50" (189.2 cm)
Width		24.00" (61.0 cm)
Depth	Base	21.25" (54.0 cm)
	Maximum	22.00" (55.9 cm)
Weight		301 lbs. (136.5 kg)
Maximum combustible material weight		(not available)

Table 3-26 Main Transformer Taps – Player's Edge-Plus Dual Screen Upright		
Type	**Tap #**	**Transformer Voltage**
115/220 VAC PRI	1	115/220 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	220 VAC Hot (primary)
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common
115/240 VAC PRI	1	115/240 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	240 VAC Hot (primary)
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common

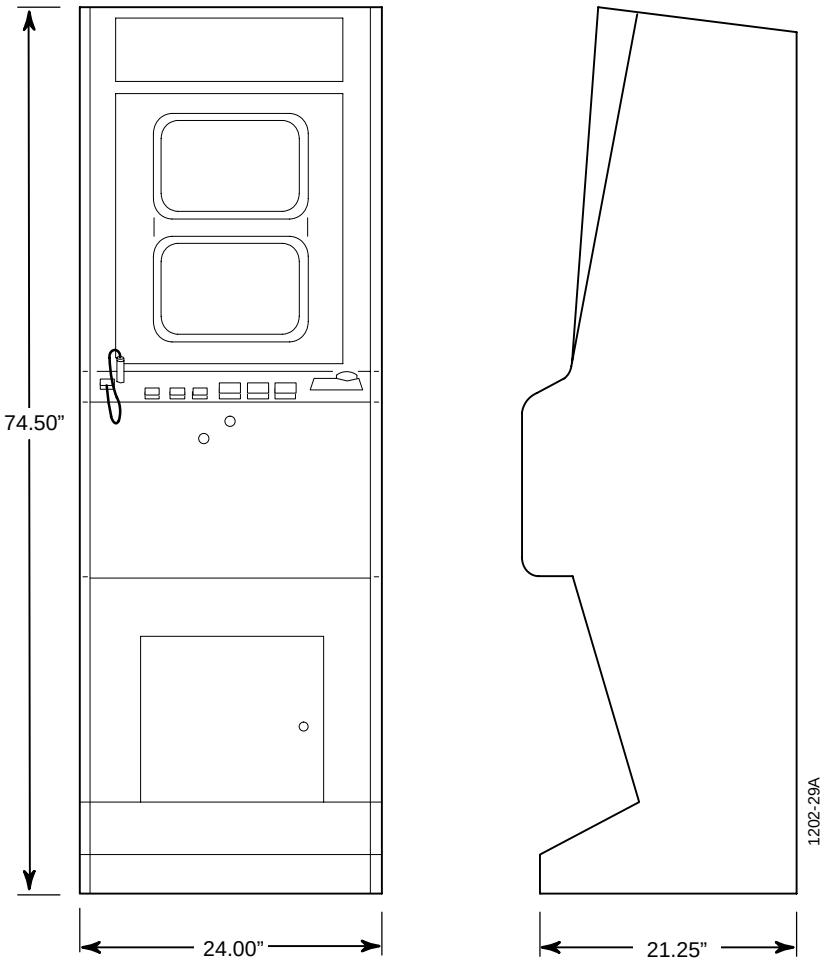
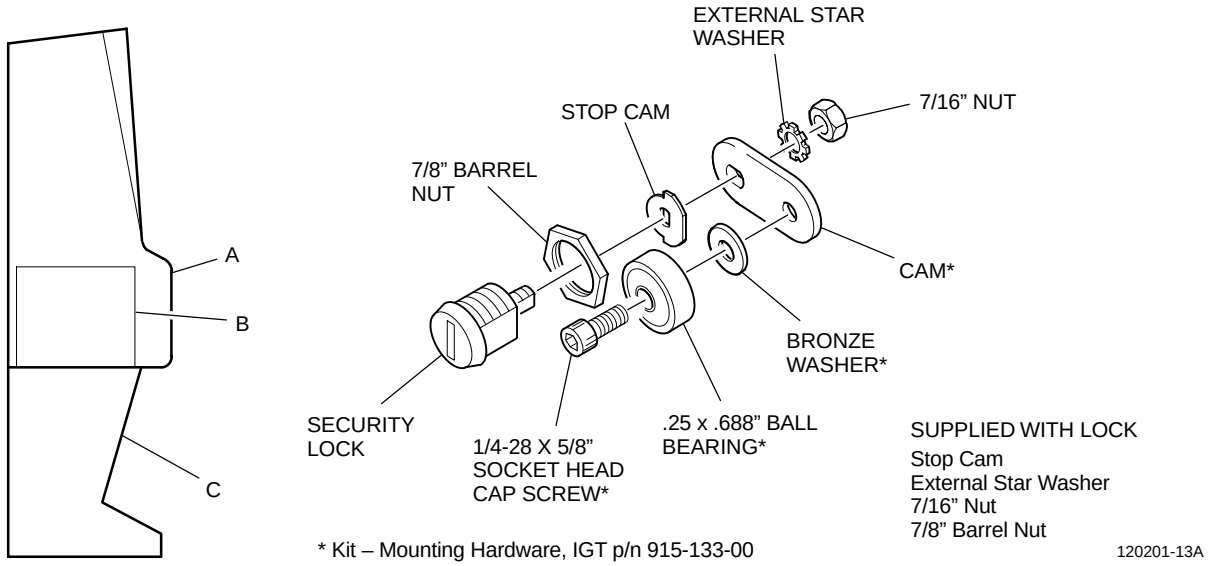
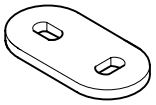
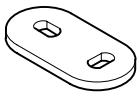


Figure 3-9. Cabinet Dimensions – Player's Edge-Plus Dual Screen Upright Model

Table 3-27
Lock Specifications – Player's Edge-Plus Dual Screen Upright



Location		Barrel Length	Key Rotation	Cams	
A	Machine Door	5/8" or 1-1/8" with 1/2" or 5/8" spacer (in hardware kit)	90° RH		no additional cam needed
B	Processor Tray (standard lock)	1-1/8"	90° LH* or RH		p/n 803-081-00 (in hardware kit)
	Processor Tray (optical lock)	1-1/8"	90° RH		p/n 803-043-00 (shipped in place)
C	Stand Drop Door	1-1/8"	90° RH		p/n 803-055-00 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

3.6 Player's Edge-Plus® Dual Screen Slant-Top

Player's Edge-Plus dual screen slant-top machines operate from 99 – 128 VAC (115), 198 – 243 VAC (220), or 216 – 264 VAC (240), all at 50/60 Hz line frequency. A main transformer provides power to all components requiring isolated voltages. Tables and figures in this section define the following specifications:

- Electrical Specifications – Table 3-28
- Physical Specifications – Table 3-29
- Main Transformer Taps – Table 3-30
- Cabinet Dimensions – Figure 3-10
- Lock Specifications – Table 3-31

Table 3-28
Electrical Specifications – Player's Edge-Plus
Dual Screen Slant-Top

Characteristic		Performance Requirement
Line voltage taps (primary)	115	99 – 128 VAC
	220	198 – 243 VAC
	240	216 – 264 VAC
Power consumption (average)	Idle, 115 VAC	150 Watts
		1.9 Amps
		512 BTU/HR
	Hopper running, 115 VAC	205 Watts
		2.5 Amps
		700 BTU/HR
	Idle, 220 VAC	155 Watts
		1.0 Amps
		530 BTU/HR
	Hopper running, 220 VAC	210 Watts
		1.6 Amps
		720 BTU/HR
Current protection	F1	24 VAC, 5 Amps
	F2	7 VAC, 5 Amps
	F3	115 VAC, 3 Amps
		220 VAC, 3 Amps
		240 VAC, 3 Amps
Line frequency		50/60 Hertz (Hz)

Table 3-29
Physical Specifications – Player's Edge-Plus
Dual Screen Slant-Top

Characteristic		Specification
Height		54.75" (139.1 cm)
Width		28.00" (71.1 cm)
Depth	Base	32.50" (82.6 cm)
	Maximum	42.50" (108.0 cm)
Weight		354 lbs. (159.3 kg)
Maximum combustible material weight		(not available)

Table 3-30
Main Transformer Taps – Player's Edge-Plus
Dual Screen Slant-Top

Type	Tap #	Transformer Voltage
115/220 VAC PRI	1	115/220 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	220 VAC Hot (primary)
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common
115/240 VAC PRI	1	115/240 VAC Common (primary)
	2	115 VAC Hot (primary)
	3	240 VAC Hot (primary
	4	115 VAC Hot (isolation)
	5	115 VAC Return (isolation)
	6	24 VAC Return
	7	24 VAC Hot
	8	7 VAC Hot
	9	7 VAC Common

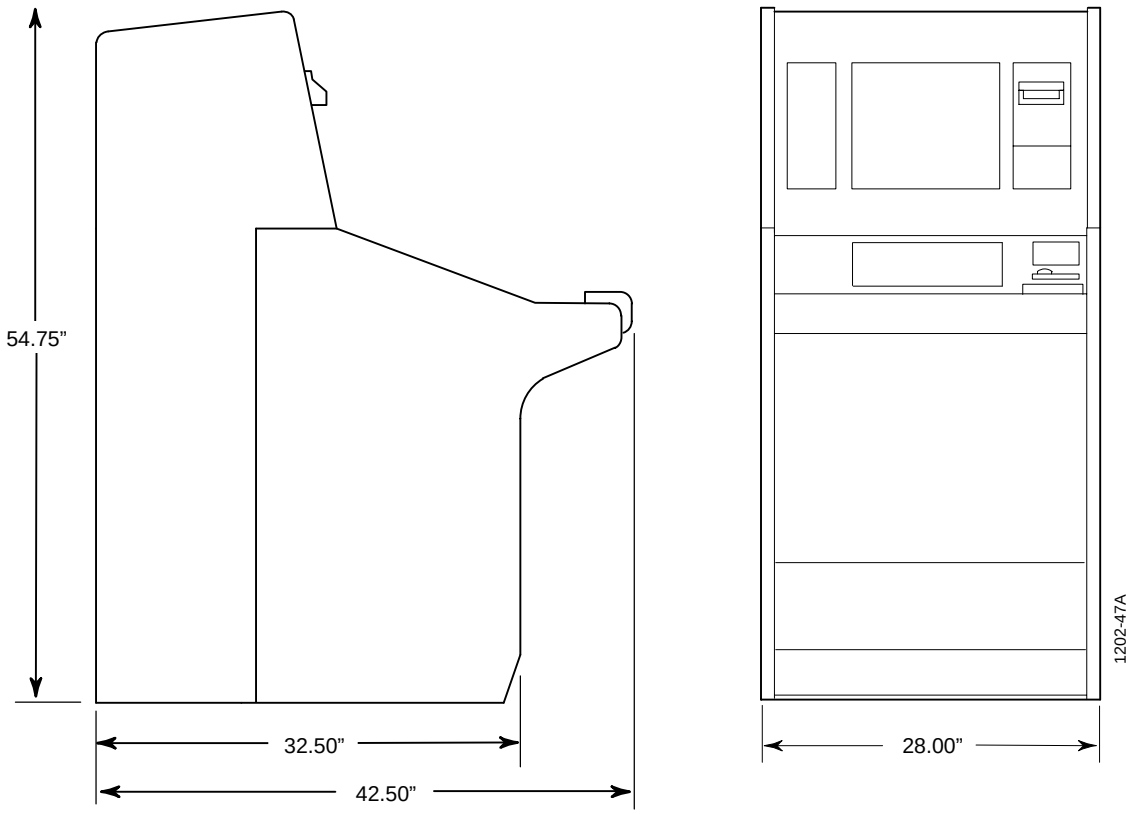
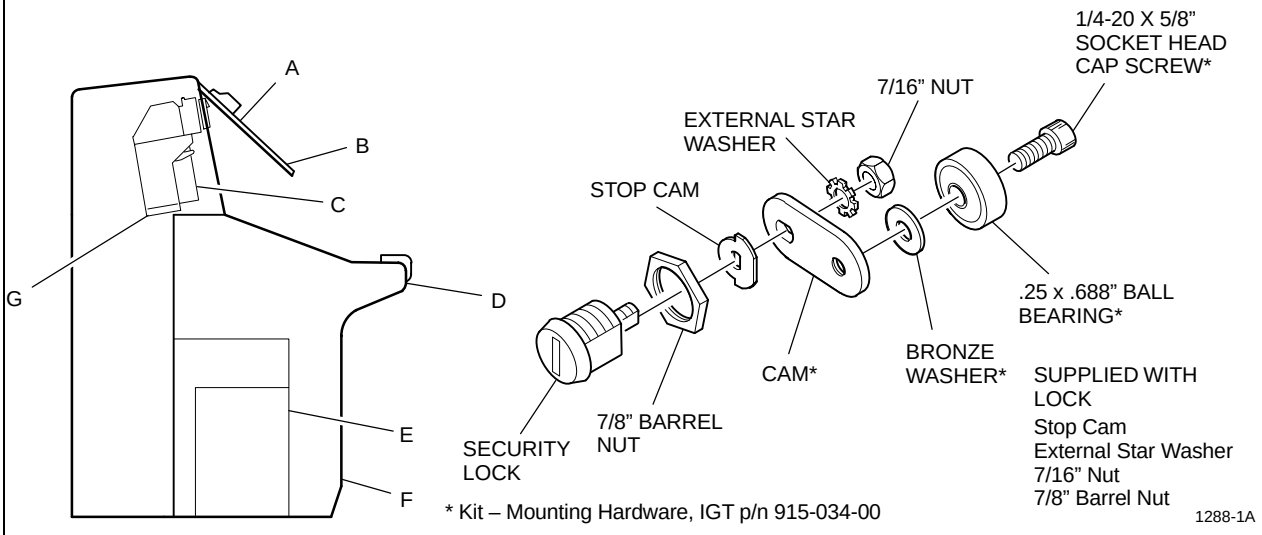
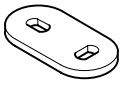


**Figure 3-10. Cabinet Dimensions –
Player's Edge-Plus Dual Screen Slant-Top Model**

Table 3-31
Lock Specifications – Player's Edge-Plus Dual Screen Slant-Top



Location		Barrel Length	Key Rotation	Cams	
A	Bill Acceptor Access Door (2)	5/8" or 1-1/8" with 1/2" spacer	180° RH		p/n 803-083-00 (in bill acceptor kit)
B	Top Enclosure	5/8" with 1/2" spacer (in game kit)	90° RH		p/n 803-085-90 (in top box kit)
C	Bill Box Retaining Lock	5/8" with 1/2" spacer (in hardware kit)	90° RH		p/n 803-077-00 (ty-rapped to lock module)
D	Bill Acceptor Cash Box Door	5/8" or 1-1/8" with 1/16" or 1/8" spacer (none with 1/8" barrel) (in hardware kit)	90° LH*		p/n 803-076-90 (dual lock capability) 2 cams are taped to validator power supply; 2 cams are taped to extra bill drop box
E	Top Panel	5/8" or 1-1/8" with 1/2" or 1/8"spacer (in hardware kit)	90° RH		p/n 803-048-00 (in hardware kit)
F	Processor Tray (standard lock)	1-1/8"	90° LH* or RH		p/n 803-032-00 (in hardware kit)
	Processor Tray (optical lock)	1-1/8"	90° RH		p/n 803-046-00 (shipped in place)
G	Drop Door	1-1/8"	90° or 180° RH		p/n 803-081-00 (in hardware kit)

All IGT barrel diameters are 3/4" unless otherwise noted. *Left-hand unlocks with counterclockwise key rotation.

Section 4

Seats

This section contains the specifications for seats used with IGT machines. Seats are available in the following styles.

- Split back
- Wrap around back
- Straight back

Seats may be finished with any of the standard Naugahyde coverings or Sherpa Shire material. Custom coverings may be substituted and are subject to availability and usability. Seats may be mounted on any of the standard pedestals.

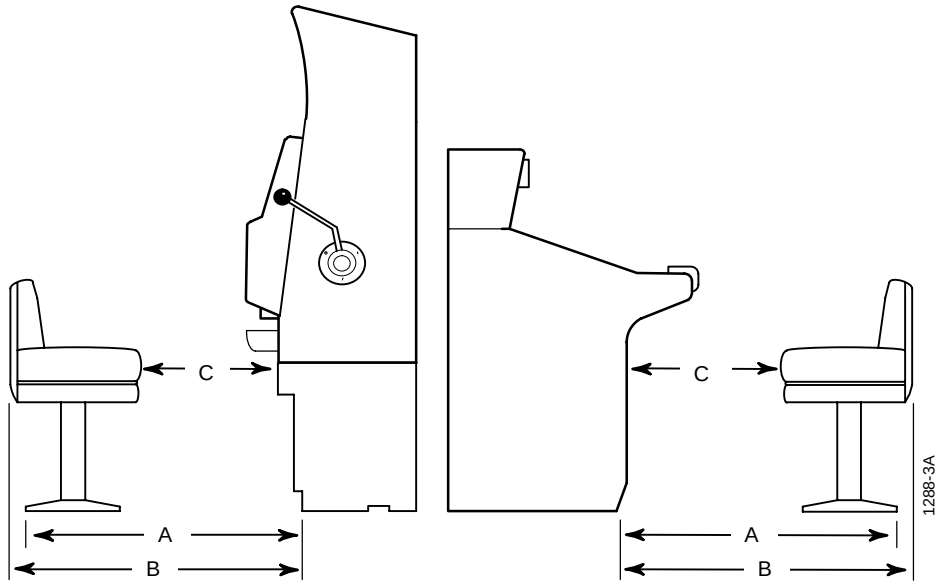
- 20″ brass-plated floorplate or pedestal with swing-away footrest for upright
- 20″ chrome-plated floorplate or pedestal with swing-away footrest for upright
- 16″ chrome-plated floorplate or pedestal for slant-top
- 16.5″ brass-plated floorplate or pedestal for slant-top

See Figure 4-1 for seat styles, and refer to Table 4-1 for dimensions and seat specifications.

Note: *Seats and seating products are available from other manufacturers. Contact an IGT account representative for more information.*

Figure 4-1. Seat Styles

Table 4-1
Seat Specifications



			A	B		C				
Seat Styles	**Base Style**	**Base Height**	**Base Length**	**Total Length**	**Seat Width**	**Distance from Machine**	**Seat Weight**	**Base Weight**	**Total Weight**	**Total Height**
Split Back	**Pedestal**	16.5”	17” Diameter	34”	16”	12”	20 lbs.	40 lbs.	60 lbs.	32”
		20”	22” Diameter	34”	16”	12”	20 lbs.	65 lbs.	85 lbs.	36”
	Floorplate	16.5”	29”	34”	16”	12”	20 lbs.	20 lbs.	40 lbs.	32”
		20”	29”	34”	16”	12”	20 lbs.	25 lbs.	45 lbs.	36”
Wrap Around Back	**Pedestal**	16.5”	17” Diameter	34”	16”	12”	24 lbs.	40 lbs.	64 lbs.	32”
		20”	22” Diameter	34”	16”	12”	24 lbs.	65 lbs.	89 lbs.	36”
	Floorplate	16.5”	29”	34”	16”	12”	24 lbs.	20 lbs.	44 lbs.	32”
		20”	29”	34”	16”	12”	24 lbs.	25 lbs.	49 lbs.	36”
Straight Back	**Pedestal**	16.5”	17” Diameter	34”	16”	12”	14 lbs.	40 lbs.	55 lbs.	31”
		20”	22” Diameter	34”	16”	12”	14 lbs.	65 lbs.	79 lbs.	35”
	Floorplate	16.5”	29”	34”	16”	12”	14 lbs.	20 lbs.	34 lbs.	31”
		20”	29”	34”	16”	12”	14 lbs.	25 lbs.	39 lbs.	35”

Glossary

ABS *(Acres Bonusing System™)*

AC *Alternating Current* An electric current that reverses its direction at regularly recurring intervals.

access path The procedure used by a database management system to access data stored in a database.

access time The time a computer takes to locate and transfer data to or from storage. Composed of seek time and transfer rate.

Account Control Executive (ACE) This software consists of the processes and databases used to define and maintain configuration details, accounting information and reporting.

Accounting Analysis System (AAS) The computer software system used to provide a database of information. The AAS uses various menu options to create and print reports.

accounting option The software option that displays statistics accumulated in game play, such as the number of coins-in or the number of credits won.

address 1) The unique number assigned to each component of a larger system. 2) In data transmission, a code for a specific terminal.

ADS *Accounting Data System*

ADSC *Accounting Data System Communicator* Used with the IGT Wide Area Progressive Security And Accounting System to receive and transmit data between the ADS and CCOM.

aging period A time period during which information (usually video lottery ticket information) is held in a readily accessible database for verification purposes.

algorithm A step-by-step procedure for solving a problem or accomplishing a task.

alternating progressive A progressive system in which there are two meters each associated with the top award on the gaming machine(s). One meter is set to a higher base amount than the other. During play on the machine(s), the meters both progress at the same rate and an arrow, or other indicator, flashes back and forth between the two meters. When the jackpot is ultimately hit, the player wins whichever amount the arrow is pointing at.

analog Varying smoothly and continuously over a range, rather than changing in discreet jumps. For example, a 12-hour clock face is an analog device that shows the time of day by continuously changing the position of the clock's hands.

archive 1) To copy programs and data onto an auxiliary storage medium, such as a disk or a tape, for long-term retention. 2) To store data for anticipated normal long-term use. 3) A procedure for transferring image information from an online optical storage medium to an offline medium.

asynchronous Not synchronized by a mutual timing signal or clock.

asynchronous transmission A method of data transmission in which the receiving and sending devices don't share a common timer, and no timing data is transmitted. Each information character is individually synchronized, usually by the start and stop of bits. The time interval between characters isn't necessarily fixed.

attendant The person who has access to accounting, diagnostics and other attendant functions by turning the attendant key switch on the machine.

attendant menu The menu entered by turning the attendant key switch that allows access to accounting, diagnostics and other attendant functions. This menu appears on the screen and shows what options are available.

attract mode Visual and/or music options intended to attract players when the machine is in the idle mode.

autobet An option that enables a player to wager the same number of credits as the previous game simply by pressing the Deal-Spin-Start switch.

autocycle The machine automatically cycles through each test without operator or attendant intervention.

autohold An option that, when selected in the self test mode, automatically holds suggested winning combinations of cards and displays a HELD message above the cards in a game.

award insert A separate piece of glass or film used when the exterior glass panel has an opening for an award insert, such as "4000 coins."

background color The screen color surrounding the game elements and the game-related information.

backup 1) A term pertaining to procedures or standby equipment available for use in the event of failure or overloading of the normally used procedures or equipment. 2) To make a copy of a program or data in case the original is lost, damaged or otherwise inaccessible.

bank controller Data condenser; responsible for communication between DCNs and other system components.

banner A setup or downloadable message which is scrolled across the main menu screen to attract or inform a player.

bar machines A collective term referring to slant-top and flat-top machines, as opposed to upright machines.

base amount The starting amount for a progressive jackpot which is also the amount that is displayed after the progressive is hit.

battery backup Auxiliary power provided to a computer so that volatile information is not lost during a power failure.

battery RAM A battery that preserves the clock settings and the RAM contents when the power is off.

baud 1) A unit of data transmission speed. 2) The maximum speed at which data can be sent down a channel, such as a telephone line.

belly glass The lower glass on the door of some machines that shows the denomination, pay table or game theme.

Bet Down A screen button that, when touched, decrements the number of credits wagered toward a game and returns them to the credit meter. If the button remains touched, the bet will continue to decrement at a determined rate until the bet reaches one.

Bet Max (Bet Five, etc.) A player panel switch or screen button that wagers either the maximum number of credits the machine will accept or, if insufficient credits exist, all remaining credits.

Bet One A player panel switch or screen button that wagers one credit each time it is pressed.

Bet Up A screen button that, when touched, increments the number of credits wagered toward a game and decrements them from the credit meter. If the button remains touched, the bet will continue to increment at a determined rate until the bet reaches maximum coins-in or the credit meter reaches zero.

bill acceptor *(same as bill validator)* Optional assembly that accepts valid paper bills and causes the host machine to either dispense change or issue credits.

bill acceptor pay mode The available options are credit only (pays only in the form of credits), player initiated (pays either credits or cash depending on the player initiated selection) and noncredit.

bill validator *(same as bill acceptor)* Optional assembly that accepts valid paper bills and causes the host machine to either dispense change or issue credits.

bill validator door The door which prevents access to the bills accumulated by the bill validator.

binary Characterized by having two different components or by having only two alternatives or values available.

binary system 1) A number system that uses only 0 and 1 as digits. 2) The representation of numbers in the base-2 system, using only the two digits 0 and 1. A single binary digit - a 0 or a 1 - is called a *bit*.

bit A contraction of binary digit. The smallest unit of information that a computer can hold. The value of a bit is either 1 or 0.

bit rate The speed at which bits are transmitted, usually expressed as bits per second or bps.

BITBLITZ IGT propriety designed video controller on the processor board which provides unmatched speed, resolution and animation capabilities.

bonus An adjustment built into the pay table of a gaming machine to pay the player additional coins for a given win as a reward for playing the maximum coins. For example, on a three coin multiplier game, a particular combination might pay 100 coins with one coin played, 200 coins with two coins played, and 500 coins with the maximum of three coins played. The 500 coin pay in this case contains a 200 coin bonus for playing with the maximum coins.

bonus button Used for interaction with ABS. Allows the player to confirm receipt of a bonus.

bonus pay Expanded pay for top awards won with maximum coins bet, greater than a linear multiple of the wager. If the top award multiplier (number of coins paid per coin bet) is 300 for one to four coins bet, it might be 900 for five (max) coin bet. *See **multiplier pay**.*

bonus server Microcomputer used for bonusing applications.

boot *(same as power up)* To start up a computer.

bps (bits per second) *(same as bit rate)* The speed at which bits are transmitted, usually expressed as bits per second or bps.

browse An option in various menus that allows the user to view data in a file without changing the information.

buffer 1) An area of memory set aside for the specific purpose of holding data until it is needed. 2) A "holding area" of the computer's memory where information can be stored by one program or device and then read at a different rate by another.

bus 1) A path along which information is transmitted electronically within a computer. 2) An electrical or electronic connection between devices.

bus specification The specification describing the physical characteristics of the bus and the protocol that governs the use of the bus.

buy-a-pay A type of game in which the player "buys" various paying combinations by playing more coins. Usually, buy-a-pay games will pay their top award only if the maximum coins have been played.

byte A unit of information consisting of a fixed number of bits.

cabinet The exterior, laminated wood "shell" that surrounds the metal enclosure on some machines.

cage A secure area in a casino used to handle and store large amounts of money.

cancel 1) A keyboard operation that deletes the line currently being typed. 2) To end a task before it is completed.

candle *See **Service Light.***

CAP *Color Attribute PROM* Contains color definitions used to build images on the screen during each phase of a video game. A complete set of video game chips includes a CAP, a set of CGs, and a game program EPROM.

card 1) A printed-circuit board that plugs into one of the computer's expansion slots, allowing the computer to use one or more peripheral devices such as disk drives. 2) A printed-circuit board or card connected to the bus in parallel with other cards.

card box (Player Tracking or PT unit) The card box (PT unit) has a card reader that scans a member's card and sends the card ID number to the system so the records can be accessed. It also has a display unit to greet the member, show points, etc.

card cage A sealed box in the machine that houses the programmed information for the game type being played. It requires a key to access it. This is also called the lower module.

card reader This is basically a player tracking input function although LEDs (ERR and OK) are available as outputs for a reader without a display. There are currently two different types of cards and card readers: 1) The Hollerith type that uses a card with punched holes for encoding and a reader utilizing LEDs and phototransistors to read it. 2) The mag stripe that uses a card with up to three magnetically encoded tracks and a reader equipped with a magnetic head to read card data.

carousel A collection of machines with a common jackpot linked together via fiber-optic cables in one specific area or location.

cash out A switch that converts machine credits to cash or payable vouchers. The Cash Out switch on the player panel activates this machine function.

cash slip A printed ticket from a video lottery terminal (VLT) that is redeemed for cash in lieu of direct payment as with a gaming machine.

cathode ray tube (CRT) An electronic tube with a screen, such as a television picture tube, upon which information can be displayed.

CC *Cluster Controller* 1) A down-line processor that collects data from a number of machines, then transmits concentrated data over a single communications channel. 2) A communication device that stores, validates and forwards accounting and security data to the central system. The most common cluster controllers are CVTs, LCTs, and LCOMs. 3) An intelligent communications device at a remote site that is responsible for polling the machines.

CCITT *Consultative Committee on International Telegraphy and Telephony* An international committee that sets standards and make re-commendations for international communication.

CCOM *Casino Communicator* Used with all Wide Area Progressive Systems, such as Megabucks® or Quartermania® systems.

central computer The central processor located at a central site.

central computer system (CCS) In linked games, monitors game machine operation and collects accounting and security information.

central processing unit (CPU) The "brain" of the computer; the microprocessor that performs the actual computations in machine language.

central site The physical place where the central system is located.

central system The hardware at the central site, along with the software used to operate and control the retail sites.

CFE *Communications Front-End* 1) A processor on the network that is between the Real Time System's processor and the cluster controllers at the remote site. The CFE is responsible for communicating with and polling the cluster controllers. When it is polled by the real time system it responds with the data gathered from the CCs. 2) A computer system that controls the transfer of data from the cluster controller to the central system.

CG *Character Generator* chip. A character generator chip located on a processor board that generates images on video monitors.

character Any symbol that has a widely understood meaning and thus can convey information. Some characters include letters, numbers and punctuation.

checksum The result of an arithmetic operation on the number of bits in a sequence, used to verify the integrity of game data in the EPROM.

circuit board A board containing embedded circuits and an attached collection of integrated circuits (chips).

circuitry A network of wires, chips and resistors and other electronic devices and connections.

CISC *Complex Instruction Set Computer* A type of central processing unit found in the majority of personal computers. It requires several clock pulses to complete one instruction.

clerk validation terminal (CVT) A cluster controller that has a keyboard and the ability to print sales reports. The cluster controller stores the data collected from the machines located at a particular location. Used by a cashier to validate printed cash-out tickets (for lottery games) prior to cash redemption.

clock 1) A timing device that generates the basic periodic signal used to control the timing of all operations in a computer. 2) A device that records the progress of real time, or some approximate of it, and whose contents are available to a computer program.

clock chip A special chip in which parameter RAM and the current setting for the date and time are stored. This chip is powered by a battery when the system is off, thus preserving the information.

clock speed The rate at which a microprocessor executes instructions.

cluster controller (CC) 1) A down-line processor that collects data from a number of machines, then transmits concentrated data over a single communications channel. 2) A communication device that stores, validates and forwards accounting and security data to the central system. The most common cluster controllers are CVTs, LCTs, and LCOMs. 3) An intelligent communications device at the remote site that is responsible for polling the machines.

CMOS memory *Complementary Metal Oxide Semiconductor memory* Battery-powered memory, used to store backup RAM data for most IGT games. This is the primary permanent memory storage, and is located in the card cage or the lower module.

coaxial cable A special type of communications cable that permits transmission of data at high speed. Usually employed by local networks.

coin comparitor An electronic coin acceptor mechanism that receives and validates coins deposited in the machine. A coin comparitor uses a sample coin against which incoming coins are compared for validity.

coin drop box The container in the bottom of the cabinet that catches and holds coins from the coin-in assembly. In bill acceptors, the lower compartment where bills are deposited.

coin drop-box sensor switch This switch monitors the number of times the drop (cash) door is opened.

coin tray Metal tray on a machine where coins are paid out or returned.

coin-in Coins wagered. The coin-in assembly receives, verifies, counts and appropriately routes coins deposited in the machine. The coin-in meters (mechanical and software) accumulate total coin-in numbers.

coin-out Coins or credits won and paid, or credits won and wagered. The coin-out meters (mechanical and software) accumulate total coin-out numbers.

collective remote candle Several machines connected to one candle.

communication 1) The flow of information from one point (the source) to another (the receiver). 2) The act of transmitting or making known. 3) The process by which information is exchanged between individuals through the use of a commonly accepted set of symbols.

communication mode An operating state in which a serial card or port is prepared to exchange data and signals with a modem or other type of data communication equipment (DCE).

communication system Any one of several system configurations linking machines and a control device (LCOM, CVT or modem) via fiber-optic cables to a central computer for the purpose of gathering accounting data.

communications channel The physical means of connecting one location or device to another for the purpose of transmitting and receiving data. Coaxial cables, fiber optics, microwave signals, telephone lines and satellite communications all serve as communication channels.

communications front-end (CFE) 1) A processor on the network that is between the Real Time System's processor and the cluster controllers at the remote site. The CFE is responsible for communicating with and polling the cluster controllers. When it is polled by the real time system it responds with the data gathered from the CCs. 2) A computer system that controls the transfer of data from the cluster controller to the central system.

communications protocol A set of communication rules that provides for error checking between devices and ensures that transmitted data are not lost.

concentrator Data control switch to route data flow to/from the slot bank(s) and bonus server, and to/from the slot bank(s) to IGS.

configuration 1) A general-purpose computer term that can refer to the way a computer is set up. 2) The total combination of hardware components that make up a computer system. 3) The software settings that allow various hardware components of a computer system to communicate with one another.

configuration workstation Console for ABS and the only user interface with the system; configures parameters of ABS.

configure To change software or hardware actions by changing settings.

contribution The percentage of total play into a machine that is applied to the progressive jackpots and reserve funds. The number is divided by all locations on line based on the amount of play per each game at that location.

control character A non-printing character that controls or modifies the way information is printed or displayed.

controlling central agency The entity that has full responsibility for the operation and maintenance of the gaming system.

coprocessor An auxiliary processor that is designed to relieve the demand on the main processor by performing a few specific tasks.

CPU *Central Processing Unit* The major component of a computer system with the circuitry to control the interpretation and execution of instructions.

CRC *Cyclic Redundancy Check* Signals, sent between microprocessor devices, to verify the identity of each device in order to prevent tampering or incorrect data being sent.

credit One credit is equal to the denomination of the game being played. Games are played using credits for ease of displaying the amount bet and won.

credit limit The maximum number of credits the machine will accumulate before causing either a hopper-pay, hand-pay or cash-out ticket situation.

credit play Allows all awards, except the top award and hand pays, to accumulate on the Credits display rather than dispensing from the hopper. Some game versions allow player-selected credit or noncredit play.

credits cancelled Credits hand-paid (but not won), that are cashed out of the credit meter. These credits could come from either a coin-in or a bill acceptor.

credits collected The sum of credits won and credits cancelled that are paid out during cash out.

CRT *Cathode-Ray Tube* An electronic tube with a screen, such as a television picture tube, upon which information can be displayed.

current contribution amount The value of the prize contribution at the current point of time.

cursor 1) The moving, sliding, or blinking symbol on a CRT screen that indicates where the next character will appear. 2) A symbol displayed on the video monitor in the self test mode indicating where the user's next action will take effect.

CVT *Clerk Validation Terminal* A cluster controller that has a keyboard and the ability to print sales reports. The cluster controller stores the data collected from the machines located at a particular location. Used by a cashier to validate printed cash-out tickets (for lottery games) prior to cash redemption.

DACOM *Dutch Asynchronous Communication System* A data collection system used only in Holland.

daisy chain A colloquial term for a group of devices connected to a host device, where the first device in the "chain" is connected to the host, the second device is connected to the first and the third device is connected to the second, and so on. To link together sequentially.

data Information.

data bits In the stream of bits being sent from a computer to a peripheral device or another computer, the bits that contain meaningful information.

data bus The path along which general information is transmitted within the computer.

data byte The basic unit of data the computer sends to the printer.

data communications 1) The movement of encoded information by means of electrical transmission systems. 2) The entire process and science of enabling digital devices, such as computers, to communicate with each other.

data encryption A coding technique used to secure sensitive data by mixing or jumbling the data according to a predetermined format.

database A collection of information organized in a form that can be readily manipulated and sorted by a computer user.

database management system A software system for organizing, storing, retrieving, analyzing and modifying information in a database.

day meters The data resulting from the last daily poll of the machines. They provide the data on the number of games played and won, dollars played and won, and other critical information.

DC *Direct Current* An electric current flowing in one direction.

DCN *(Data Collection Node)* An electronic circuit board connected to each game in the Acres Bonusing System.™ It handles communication between the host and machine, receives bonus promotions from bonus servers, and sends bonus-related information to bonus servers, concentrator and the host.

DCS *Data Communication System* One of several optional communication systems whereby the machine sends selected data to an external accounting device.

DCU *Data Collection Unit* A device capable of collecting and storing information (real-time data) from up to 32 card boxes. It also receives data and messages from the FEC for transfer to the card boxes.

decimal number A numeral, usually of more than one digit, representing a sum in which the quantity represented by each digit is based on a radix of 10. The digits used are 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

decimal system The commonly used form of number representation, in which numbers are expressed in the base-10 system, using the ten digits 0 through 9.

default A value, action, or setting that a computer system assumes, unless the user gives an explicit instruction to the contrary.

degauss To correct video display discoloration by neutralizing the magnetic field of a video monitor using a special degaussing tool.

delete 1) To remove or eliminate, as to erase data from a field or to eliminate a record from a file. 2) A method of erasing data.

denomination A factor that determines the monetary value of one unit of credit.

diagnostics The mode in which the machine can be tested for module replacement. Tests for I/O (input/output), peripherals, display devices, and other hardware may be included.

dialog box A window that appears over the main screen to provide information to the user or to request information from the user. The dialog box normally requires a response or acknowledgment from the user.

digital Represented in a discrete (noncontinuous) form, such as numerical digits or integers.

digital-to-analog converter (DAC) A device that converts quantities from digital to analog form.

DIP switch *Dual In-line Package* switch A small switch that can be manually set for one of two different values (usually on or off). DIP switches are used on PC boards for setting up various machine configurations.

disk A flat, circular, magnetic surface, serving as a medium for storing information.

disk operating system (DOS) An operating system whose principal function is to manage files and communication with one or more drives.

display A general term to describe what is seen on the screen of the display device of a computer.

display board This is the player tracking output accessory to the SMIB logic board. It contains an encased vacuum fluorescent display, the driver and negative power supply for the display, a VIP light, a display control chip and a connection to the logic board.

diverter The portion of the coin-in assembly that channels coins to either the hopper or the drop box.

double up An extended game play available to the player to double his current winnings.

download To transfer files or information from one computer to another, or from a computer to a peripheral device such as a printer.

drop Coins or bills in the drop box.

drop box The container in the bottom of the cabinet that catches and holds coins when the hopper is full. In bill acceptors, the lower compartment where bills are deposited.

drop door The door normally on the bottom of the machine or in the stand which prevents access to the coin drop.

drop-door sensor switch Monitors the number of times the drop (cash) door is opened.

drop hold percentage Also referred to as coin room percentage. Expression used in some casinos to express what percentage of the total drop of a gaming machine is money actually won. Calculated as follows:

$$\frac{\text{Total Drop - (Fills + Jackpots)}}{\text{Total Drop}}$$

drop-in bar (DIB) A physical package format where the machine is set into a horizontal bar counter-top or contained in a self-contained cabinet.

dual-monitor module Optional video monitor assembly made to attach to and work with a video machine.

DUART/UART *Dual Universal Asynchronous Receiver/Transmitter* and *Universal Asynchronous Receiver/Transmitter* A communication IC that can interface between a microprocessor and a serial channel.

E-Squared *See **EEPROM**.*

EEPROM *Electrically Erasable Programmable Read-Only Memory* Many IGT machines utilize an EEPROM chip on the motherboard to store backup game data.

EGM *Electronic Gaming Machine (same as VGD*) A physical machine that collects and dispenses credits, and houses the games.

electronic funds transfer (EFT) A cashless method of paying for goods or services. Electronic signals between computers are used to adjust the accounts of the parties involved in a transaction. Commonly used to make periodic payments, such as insurance premiums.

enable To activate, usually with a software command.

enclosure The metal body that houses internal machine components. The enclosure is often installed in a cabinet.

encryption The password used to encrypt a message in communications.

End of Day (EOD) *See **End of Period**.*

End of Period (EOP) A period of time after which game play, coin-in, coin-out and other gaming performance parameters are verified to provide operational control and management information.

enrollment The process of qualifying a component for participation in a network.

Enter key A key that confirms an entry or sometimes a command.

EPROM *Erasable Programmable Read-Only Memory* A non-volatile medium for program instructions. Game programs and video graphics are stored on EPROMs.

error A data processing problem. The machine enters the tilt mode, an error message displays and game play is suspended until the problem is corrected.

escalator In slant-top and flat-top machines, the part of the hopper that carries coins up to the coin tray.

ESD *Electrostatic Discharge* The discharge of electrical energy that occurs when a charged body comes into close proximity to an object of lesser or opposite charge.

Ethernet A high-speed local area network that consists of a cable technology and a series of communication protocols. It is a registered trademark of the Xerox Corporation.

Ethernet cable systems A system of high-performance coaxial cables widely used in the communications industry.

Eurocredit A coin-in/credit system used in some gaming machines that allows the player to insert coins over and above the maximum number that is playable on a per-game basis. There is an operator-selectable maximum credit limit on the Eurocredit machines and players can insert coins at their discretion until this limit is reached. Eurocredit machines are most popular in casinos outside the U.S.

Euro noncredit A credit mode where once the maximum bet is reached, all inserted coins are accumulated as credits in the credits meter up to the credit limit. Any single win greater than the hopper limit is hand paid. All other wins are paid from the hopper to the coin tray. The credit limit is set in self test.

event log Allows an operator or attendant to view metered events recorded by the machine.

exception log A paper record of all reported abnormal events generated on a Wide Area Progressive System.

exception message A message that is printed on the exception printer for any abnormal conditions that cause status to alter from normal.

expanded pay table glass The lower glass on a machine that shows an extension of the upper glass pay table.

expanded reel The term used to describe an electronic slot machine in which the number of reel stops in the computer program is greater than the number of stops on the actual reels of the slot machine.

FCON *Fiber Converter* An electronic device that converts fiber-optic light signals to electrical signals for 4-wire transmission.

FEC *Front-End Controller* A dedicated computer that polls machine data from the DCUs for transfer to the Transaction Processor (TP). It also sends information from the TP back through the DCUs to the card boxes. All messages and data, whether received or sent by the FEC, must be in RS-232 computer readable code.

fiber optics The transmission of information with light energy as the transmission carrier and plastic or glass as the medium.

fiber-optic cable A transmission medium that carries pulses of light over strands of glass. Fiber optics can carry hundreds of millions of bits per second over thousands of miles. Since the glass fibers are carrying light, they do not receive outside interference and do not lose appreciable strength. Fiber-optic transmission reduces errors in transmission. A fiber-optic cable contains two glass strands. Each strand or fiber is covered in a sheath made of plastic.

fiber-optic interface board Any one of several optional PC boards that convert electronic digital data to light for fiber-optic transmission.

Fiber "T" A device for branching fiber-optic communication runs or amplifying a fiber run that exceeds 80 feet.

field A single piece of information, the smallest unit normally manipulated by a database management system. A record is made up of one or more fields.

field service manual (FSM) An IGT service publication covering machine hardware, including: installation, maintenance, troubleshooting, disassembly and assembly, parts lists, wiring diagrams and schematics.

field service supplement An IGT service publication that describes hardware and software specific to a certain machine or jurisdiction.

file Any named ordered collection of information stored on a disk.

filename The name that identifies a file.

fill Coins that are added to the hopper of a gaming machine that has become empty as a result of player wins.

firmware Programs stored permanently in read-only memory (ROM).

FLASH Also referred to as programmable and erasable read only memory which is a device that allows data to be re-written.

flash card A credit-card-sized memory device used in the LCD unit for bonus game and attract message storage.

flat-top A type of machine with a flat top, designed for installation in a bar cabinet. The game is viewed from above the machine while the player is typically seated.

floppy disk A disk made of flexible plastic, as opposed to a hard disk made of metal.

fluorescent flasher Controls the fluorescent lights on the machine that indicate the player is in bonus mode.

format 1) The form in which information is organized or presented. 2) The general shape and appearance of a printer's output. 3) To divide a disk into tracks and sectors where information can be stored.

frequency The number of complete cycles transmitted per second, usually expressed in hertz.

full-duplex communication A method of data transmission where two devices transmit data simultaneously. This method allows the receiving device to echo back each character of your message as it is received.

function keys Specially designed keys that, when pressed, initiate a function on a computer keyboard, word processor or graphics terminal.

funding entity The entity that accounts for and finances a prize amount.

game A program designed to offer a player chances to win prizes by betting some unit of credit of the correct denomination. There can be several games in one machine.

game closed mode In linked games, describes suspension of normal game play by the central computer system.

game code The second half of the model code; it refers to which game type is represented by glass or software (i.e., Joker Poker = XX65.)

game play mode The operational mode that exists when the machine is functioning properly and a customer is playing a game.

game speed The pace at which a game is played. This may be set by a player or an operator in the setup mode.

ghost A stop on a slot reel which does not contain a slot symbol.

gigabyte (GB) A unit of measurement equal to 1024 megabytes.

group A set of progressive prizes with a reserve fund. The prizes all have the same base denomination and funding entity.

half-duplex communication A way of communicating between your computer and another computer or a peripheral device in which you can only send data or receive, not both at one time.

hand In video poker games, one set of five cards. A standard poker game consists of an original hand, and after the player keeps or rejects cards, a final hand. Wins or losses are based on the final hand.

hand pay Money award paid by an attendant rather than being dispensed by the machine.

handheld terminal *(same as wand or scanner)* A portable device used to read machine data and then download the information to a computer.

handle pulls The total number of pulls of the machine handle. Also known as "games played."

hard count The counting of money generated by gaming operations in the form of coins.

hard drop The controlled process of removing coins from gaming machines.

hard meters An internal accounting system that is displayed on mechanical meters on all video and reel gaming machines. These meters are not resettable, i.e. they are at "zero" when the machine is built and they continue to count the cumulative number of coins in, out, etc. throughout the life of the machine.

hertz (Hz) An expression used to describe the frequency of the power line voltage supplied to the gaming machine, e.g. 50 Hertz, 60 Hertz.

hexadecimal system The representation of numbers in the base-16 system using the ten digits, 0 through 9, and the six letters, A through F.

hit frequency A term used to describe the average frequency at which winning game outcomes will occur on a gaming machine. It is calculated by dividing the number of individual hits, or winning games, by the number of possible game outcome combinations.

Hold The physical buttons on video poker machines that, when pressed, allow the player to keep cards in a poker game.

hold percentage The percent of coins played that are retained or won by the gaming machine. It is calculated by subtracting the payback percentage from 100 percent.

holeywheel hopper A type of hopper mechanism, initially developed for large, heavy coins, that uses a punched rotating wheel to collect coins from the hopper bowl, separate them from the other coins for transport to the eject area.

hopper An assembly inside the machine that receives, holds and dispenses coins. When the hopper is full, coins are diverted to the drop box.

hopper probe A simple electromechanical sensing element located in the coin hopper. When the coin mass in the hopper bowl reaches and touches the hopper probe, a signal is sent to the microcomputer indicating that the hopper is full. *See **diverter.***

host computer 1) A central processing unit that provides the computing power for the remote terminals and peripheral devices connected to it. 2) The computer that is in charge during a telecommunications or local area network session. 3) The central controlling computer in a network of computers.

host machine A machine used in conjunction with another assembly that cannot stand alone, such as a dual-monitor module or a bill acceptor.

hybrid A term utilized by phone companies to define the unit in telephone rooms where a phone company circuit ends and the in-house wiring begins.

IBA *Imbedded Bill Acceptor* The bill acceptor is considered imbedded whether it is in a cabinet or top box format. *See **bill acceptor.***

icon 1) A symbol that graphically represents an object, a concept, or a message. 2) A pictorial representation of a software function.

idle mode The condition that exists when a game is not being played and no credits exist on the credit meter.

IGS *(IGT Gaming Systems)*

initialize 1) To set to an initial state or value in preparation for some computation. 2) To prepare a blank disk to receive information by organizing its surface into tracks and sectors *(format).*

input The introduction of data from an external storage medium into a computer's internal storage unit.

input/output (I/O) The inputs and outputs of a machine. Typically, inputs are from switches, etc., and outputs are to lamps, etc.

insert A separate piece of glass or film that contains information not printed on the exterior glass panel. This can be award amounts, a pay table, or other important information.

Intel 8032 Microprocessor The microprocessor used in certain SMART System floor devices – SMIB, DCU, and SMART card reader.

interface 1) The point at which independent systems or device groups interact. The devices, rules or conventions by which one component of a system communicates with another. 2) The part of a program that defines constants, variables, and data structures, rather than procedures. 3) The equipment that accepts electrical signals form one part of a computer system and renders them into a form that can be used by another part. 4) Hardware or software that links the computer to a device. 5) To convert signals from one form to another and pass them between two pieces of equipment.

interface card A card that handles the interface (or connection) between the computer and a particular peripheral device.

IPT *imbedded player tracking* Enables the owner/operator to identify and gather information about playing patterns on individuals through the use of customer membership cards.

jackpot reset switch *(same as reset switch)* A key-activated switch that: (a) enables option selections within some self test pages; (b) enters and advances through the statistical data mode; and (c) resets the machine's internal progressive parameters (as applicable) after a jackpot.

jurisdiction An authority within which all gaming regulations are governed.

K *(same as kilobyte)* A unit of measurement consisting of 1024 bytes. K can also stand for the number 1024 in which case Kbyte is used for kilobyte.

Kbyte *(same as kilobyte*) A unit of measurement consisting of 1024 bytes. K can also stand for the number 1024 in which case Kbyte is used for kilobyte.

kilobyte (K) A unit of measurement consisting of 1024 bytes. K can also stand for the number 1024 in which case Kbyte is used for kilobyte.

kilohertz (kHz) A unit of measurement of frequency, equal to 1,000 hertz.

LAN *Local Area Network* A group of computers connected for the purpose of sharing resources.

LCD See Liquid Crystal Display.

LCT *Local Communication Terminal* A communication controller that collects data from machines and transmits it to a central computer.

LED *Light Emitting Diode* An alphanumeric display unit that glows when supplied with a specified voltage, commonly used in digital displays and as status indicators.

light box A plastic bracket containing fluorescent lights to illuminate the display glass.

light pen A device used to make game selections directly on the screen in some video games, such as keno.

line lights The payline lamps located adjacent to the pay lines in the reel glass of a multi-line slot machine. As coins are inserted, the lamps light in sequence, indicating the pay lines that are "activated."

line up A type of game that utilizes spinning slot reels or a video simulation of reels. A win occurs when reel symbols line up in a specified manner.

link Two or more machines that are connected to a progressive meter.

link/stand alone progressive Link progressive applies when the machine is connected in series with a group of machines and also connected to a progressive controller. When correctly installed and active, the current progressive top awards are the same for all machines in that link. Stand alone progressive applies when the machine is not connected in any way to other machines. Internal progressive amounts must be set for each machine.

Liquid Crystal Display (LCD) A color, active-matrix display similar to a laptop personal computer. This display is located in the top box and is used for bonus games, custom attract messages and a variety of diagnostic and setup displays.

live system A computer that runs the Wide Area Progressive games and displays the main system window.

local area network (LAN) A group of computers connected for the purpose of sharing resources.

Local Area Progressive (LAP) A group of prizes that are paid by a funding entity other then the controlling central agency.

lockout A solenoid device for disallowing coin or token acceptance.

lockup This situation occurs during some tilt and error conditions. Game play is suspended but self test and statistical data modes are operational.

log in *(same as log on)* To sign-in on a computer.

log off *(same as log out)* 1) To stop using the computer. 2) The process of signing off the system.

log on *(same as log in)* To sign-in on a computer.

log out *(same as log off)* 1) To stop using the computer. 2) The process of signing off the system.

logic door An electronics cage and lock which prevent access to the main processor board. *See **card cage.***

lottery A jurisdiction in which some form of gambling is allowed, but typically more restricted than gaming jurisdictions. A system usually connected to a central computer via a communication system.

loud bowl A large coin tray designed to resound loudly as coins are paid out.

lower module A removable assembly within the machine. The chassis houses the power supply, motherboard, processor board, connector panels and various optional assemblies or PC boards.

LSAMS *Lottery Security, Accounting, Management System* IGT's lottery system, including the communication protocol from the CS (central computer) to the CC (Cluster Controller) and from the CC to the machine.

machine A gaming machine. This term is also synonymous with EGM, gaming machine, VGD, VGM and VLT. Sometimes a lottery terminal.

machine address *(same as polling address)* A unique hexadecimal number resident on a processor board or communication board, and used by some accounting and communication systems for machine identification.

machine door On machines, the main access door typically contains the player switches and/or other input devices, coin entry, key lock and various other assemblies.

main door The door on the front of the machine which prevents access to the printer, hopper, front panel switches and other operator accessible items.

main menu In a video game or software program, an initial selection screen where the player or operator chooses which game to play or portion of the program to run.

master file Data stored in a computer system concerning relatively stable information such as machine serial numbers and denominations or personal data on club players for a player tracking system.

max bet *(same as max coin)* The maximum number of coins or credits the game will accept for a single play (usually six or less).

max coin *(same as max bet)* The maximum number of coins or credits the game will accept for a single play (usually six or less).

max hopper pay The determined amount of coins that the hopper will pay out before a hand pay is needed. Should correspond with the amount that appears on the glass insert.

max pay *(same as max win)* The highest award on the game pay table.

max win *(same as max pay)* The highest award on the game pay table.

megabyte (MB) A unit of measurement equal to 1024 kilobytes or 1,048,576 bytes.

megahertz (MHz) A measure of transmission frequency equal to one million hertz.

memory A hardware component of a computer system that can store information for later retrieval.

memory location A unit of main memory that is identified by an address and can hold a single item of information of a fixed size.

menu item A choice in a menu, usually a command to the current application.

meters Counters. IGT machines utilize both mechanical and software meters to collect game play data. Hardware meters collect lifetime totals and cannot be reset. Software meters are displayed in the statistical data mode, and can be reset to zero.

microprocessor An integrated circuit on the computer's main circuit board. The microprocessor carries out software instructions by directing the flow of electrical impulses through the computer.

MIDI *Musical Instrument Digital Interface* An industry standard for music being produced digitally.

mix The game types (poker, keno, reel slots, etc.), configurations (upright, slant-top, or flat top machines), and denominations on the casino floor. An empirical ratio adjusted continuously by slot management.

mode An operational state of the machine. IGT machines typically have five modes: game play, idle, statistical data, self test and tilt.

modem (acronym for *mo*dulator/*dem*odulator) A device that provides communication capabilities between pieces of computer equipment over common telephone lines.

monitor A display device similar to a television screen used in video games to receive and display game and service information.

monitor mask A molded plastic frame that surrounds the outside edges of the video monitor (or monitors) and enhances the screen display by reducing glare and light reflections from inside the machine.

Montana-style credit A credit mode where all inserted coins are directed to the credits meter up to the credit limit. In order to place a bet toward the next game, the player must play a credit. A win that would cause the credits meter to exceed the credit limit is hopper paid. If this hopper pay amount is greater than the hopper limit, the amount is hand paid. All other wins are paid to the credits meter. The credit limit is set in self test. Anytime when coins are inserted, the player must play at least one game before they are allowed to cash out the accumulated credits.

motherboard A PC board on the lower module that acts as an interface between the processor board and the electrical machine assemblies.

MS-DOS The Microsoft Disk Operation System. An operating system that governs the IBM PC and compatible computers.

multi-coin game Allows the player the opportunity to increase the amount awarded by increasing the amount wagered.

multi-line game Allows the player the opportunity to play multiple paylines on reel slots by increasing the amount wagered.

multiple level progressives Progressive amounts added to second, third, etc., pay levels and displayed. Limited only by machine program capability.

multiplier pay Each win amount is a linear multiple of the number of coins or credits bet. *See* ***bonus pay.***

multiplexer (MPX or MUX) A device that allows several communications lines to share one computer data channel.

NETPLEX A multidrop serial communication link between the machine and all installed peripheral devices used to transfer information and allow control of peripherals.

network 1) The result of two or more computers being connected to allow them to share the same software and information. 2) A system of interconnected computers and terminals.

network administration Management of software and hardware that connects computers in a network.

network administrator The person responsible for setting up and maintaining a network.

Nevada-style credit A credit mode where coins may only be inserted up to the maximum bet amount. Any single win greater than the hopper limit is hand paid. All other wins are paid to the credits meter up to the maximum hopper setting.

Nevada-style noncredit A credit mode in an S-Plus International game where coins may only be inserted up to the maximum bet amount. Any single win greater than the hopper limit is hand paid. All other wins are paid from the hopper to the coin tray.

node 1) Any terminal, computer, or peripheral in a computer network. 2) The connecting point on a component, printed circuit board, or logic element where electrical connections can be made.

noncredit mode The machine will accept no more than the max bet allowed per game, and all wins are paid out in coins or by an attendant at the time of the win. If a bill acceptor is present, it functions as a changer only.

noncredit play The machine will accept no more than the max bet allowed per game, and all wins are paid out in coins or by an attendant at the time of the win. If a bill acceptor is present, it functions as a changer only.

note acceptor *(same as note validator)* Optional assembly that accepts valid paper notes and causes the host machine to either dispense change or issue credits.

note acceptor pay mode The available options are credit only (pays only in the form of credits), player initiated (pays either credits or cash depending on the player initiated selection) and noncredit.

note validator *(same as note acceptor)* Optional assembly that accepts valid paper notes and causes the host machine to either dispense change or issue credits.

note validator door The door which prevents access to the notes accumulated by the note validator.

NTSC decoder board An optional PC board that allows video machines to display an NTSC (National Television Standards Committee) signal. DIP switches on the board allow various configurations.

nudge The reels in this slot game move up or down one symbol when a nudge symbol hits. Examples of a nudge game are Slam Dunk, Balloon Bars and Knock Down.

offline Not currently communicating with host system.

online Communicating with host system.

operator A machine operator, owner, service technician or any other person with access to the interior of the machine by opening the front door.

operator menu The menu entered by pressing the test switch with the main door open that allows access to accounting, diagnostics, setup and other operator functions. This menu has an on screen display that shows what options are available.

operator selectable A value or option that is selectable only by the operator from the operator menu. The default value is one selected at machine configuration.

optic sensor An electronic device used to sense mechanical motion and provide an electrical signal of this motion to the microcomputer system. In most of the optics devices used throughout IGT products, there is an infrared (invisible) light source that emits a beam of light on a phototransmitter. The device is strategically placed in the machine so that the mechanical motion which is being sensed will block the light path, thus causing a signal change in the output of the phototransistor.

optical coin detection The technique of validating coins being put in or being paid out of a gaming device using optical detectors.

optimum A calculated payout percentage range for a poker game assuming an "optimum" (skilled) play strategy for each and every hand.

optimum player return The theoretical payback percentage on a poker machine being played according to the best case strategy for each and every hand.

ordered royal flush A poker game hand consisting of a royal flush positioned from left to right on the screen.

out of service mode The machine is rendered inoperable without turning the power off.

output 1) Data transferred from a computer's internal storage unit to some storage or output device. 2) The final result of data that have been processed by the computer.

page In video games, one full screen display of information as presented in the self test and statistical data modes.

parallel interface A personal computer interface that uses a multiple-path communication line, often used for printer connection.

partial pay A predetermined number of coins that is paid to the player from the machine coin hopper upon hitting a jackpot. The balance of the jackpot is paid by an attendant. The number of coins paid in the partial pay is usually operator selectable.

partitioned software A slot machine architecture in which the machine's software program is broken down into two separate sections and stored in two separate memories. The overall machine operation instructions are stored separately from the reel strip and pay table information.

password A special word, code or symbol that must be presented to the computer system to gain access to its resources. Used for identification and security purposes.

pay table A chart of pay amounts as a function of each winning combination and number of coins or credits bet.

pay table glass The top and/or bottom glass that shows the pay table for that machine.

pay table insert A separate piece of glass or film used when the exterior glass has a "grid" printed on it, but needs an additional pay table insert behind it representing the pay table.

payback percentage The amount of money the player is expected to win divided by the amount of money played over a long period of time, expressed as a percentage. On games where there is a bonus pay on jackpots won with maximum coins played, the payback percentage will vary slightly, depending on how may coins per game are played.

payout An award from a game.

PCON *Plastic fiber universal Converter* A SMART System accessory that converts fiber-optic light signals from the DCUs to RS-232 computer readable code for the FEC. It also converts signals the other way (RS-232 to light).

peripheral An intelligent input/output device connected to the machine such as a touchscreen, a printer, or a bill validator that communicates to the main processor via cables and proprietary interface software.

PEROM *Programmable and Erasable Read Only Memory* A device that allows data to be re-written. *(same as FLASH)*

Personal Computer-Slot Accounting System (PC-SAS) A data collection package that involves machines linked together fiber optically.

physical coins-in The number of actual coins physically deposited into a game (differentiated from coin-in, which can be either a coin or a credit that is wagered).

physical stop The actual places where the spinning reel can stop. There is a stop for each symbol shown on the reel strip.

pinwheel A rotating steel disc used in coin hoppers to dispense coins. Small metal "pins" or raised points located along the outer circumference of the pinwheel provide individual "pockets" where coins can ride along as the pinwheel rotates. As the coins reach the exit point of the hopper, they are stripped off the pinwheel by the hopper knife.

play max *(same as Play "X")* A screen button or a physical button. The play max function bets the maximum number of credits allowed provided there are enough credits on the credit meter.

play "X" *(same as Play max)* A screen button or a physical button. The play max function bets the maximum number of credits allowed provided there are enough credits on the credit meter.

player digital display In reel slot machines, game information is presented as an LED digital display through windows on the slot glass.

player panel switch *(same as player switch)* An input switch that communicates player selections to the processor board. Some player switches also have functions in self test and statistical data modes.

player selectable credit A gaming machine feature that allows the player to play the machine in either credit or noncredit mode. The player uses the Cash Out switch to select the desired mode before playing the machine.

player server Controls displayed messages that go to the vacuum fluorescent display.

player switch *(same as player panel switch)* An input switch that communicates player selections to the processor board. Some player switches also have functions in self test and statistical data modes.

Player Tracking System (PTS) A data collection package that enables the owner/operator of IGT machines to identify and gather information about players via ID cards and readers.

poll 1) An electronic request for information, usually from a central PC or other computer to various peripheral devices. 2) The process of gathering the meter information from each game and reporting it to the central computer.

polling address *(same as machine address)* The address to which the machine responds during communication.

pop-up menu A menu that appears on the screen anywhere other than in the standard menu bar location.

port The connection that allows communication between a digital system on a PC board and an external device.

power supply A circuit that supplies the DC voltages required for the operation of an electronic system. Usually a power supply will convert a 110 VAC line voltage to the needed DC voltage for a particular system.

printed-circuit board A hardware component of a computer or other electronic device, consisting of a flat, rectangular piece of rigid material, commonly fiber glass, to which integrated circuits and other electronic components are connected.

printed ticket Some machines utilize a ticket printer rather than a coin hopper. When a win occurs and the player presses the Collect Winnings switch, a printed ticket dispenses from the machine and can then be redeemed for cash.

prize amount An amount of money that can be won by playing a game. This could be a fixed amount or in the case of a progressive prizes, an amount that increases based on player activity.

prize base The initial prize amount for a progressive prize.

prize base reset This value replaces the prize base value when a progressive prize is won.

prize base revert When a progressive prize is hit this value is copied to the prize base reset. This allows for a a lower prize base reset when prizes are hit close together.

prize cap The absolute maximum dollar amount that a prize amount can reach.

prize contribution Each progressive prize has a contribution percentage associated with it., This factor is applied to each unit of credit played on the games associated with the progressive prize. The resulting contribution amount is used to increment the prize amount.

prize maximum The highest amount a prize can reach in a 24-hour period.

prize maximum boost The maximum dollar amount a prize amount can grow during a 24 hour period.

probability A number expressing the likelihood of an occurrence of a specific event.

processor The hardware component of a computer that performs the actual computation by directly executing instructions represented in machine language and stored in main memory.

processor board The printed circuit board assembly in IGT gaming machines that contains all of the microcomputer system circuitry, as well as the interface circuitry associated with the game inputs and outputs.

programmable read-only memory (PROM) A type of ROM device that is programmed after fabrication, unlike ordinary ROM devices, which are programmed during fabrication.

progressive A system of pooling a fraction of each wager into a cumulative fund that is available for a top-pay win. A game that increments the prize amount based on player participation. The three kinds of progressives are Wide Area, Local Area, and Stand Alone.

progressive controller Controls all progressive functions in a progressive link system (several machines linked together to increment progressive totals equally).

progressive meter A display meter, linked to the progressive machine(s), that shows the potential amount that could be won.

PROM *Programmable Read-Only Memory* Memory that can be programmed by electrical pulses. Once programmed, it is read-only.

protocol Generically, the communication standard between two serial devices. Often used to reference the type of security, accounting and management systems that the machine is designed to communicate with.

PRTS *Progressive Real Time System* This is the live or active system. It is in constant communication with all the devices that make up the online progressive system. The main communications interface of the PRTS is the system window.

PSR *Program Summary Report* A three or four page report that describes the features, capabilities, self test pages and statistical data information for a game's program version.

PTS *Player Tracking System* A data collection package that enables the owner/operator to identify and gather information about players via ID cards and readers.

pull-down menu A menu, usually used as an extension to the menu bar, that is hidden until you move the pointer to its title and press the mouse button.

QUART *Quad Universal Asynchronous Receiver Transmitter* A communication device that provides four independent full-duplex asynchronous receiver/transmitter channels in one single package.

RAM *Random Access Memory* A memory into which the user can enter information (write) and extract information (read). It is the working memory of the computer as well as the backup memory of game information that is stored in the CMOS RAM chip on the processor board.

random A sample drawn from a population so that each member of the population has an equal chance of being drawn.

random access memory (RAM) Volatile, digital, read/write memory that can easily have its bit pattern changed.

RBP *Rapid Bonus Progressive* A progressive configuration that can increment and pay on up to six levels of winning combinations, rather than just the top and second levels.

read-only memory (ROM) Memory whose contents can be read but not changed; used for storing firmware.

real time A term describing online computer processing systems that receive and process data quickly enough to produce output to control, direct, or affect the outcome of an ongoing activity or process.

real time clock An optional battery-backed clock on the processor board used by some games.

reel strip A set of symbols on a slot reel.

reel strip list Provides exact pay table information and symbol alignment on each reel, and is shipped with the machine or with new reel program orders.

reserve fund This account is used by the funding entity to accumulate prize contributions to pay for the prize base. As prize amounts are won, the prize base reset is used to decrement the amount.

reset amount The starting amount for a progressive jackpot which is also the amount that is displayed after the progressive is hit.

reset switch A key-activated switch that: enables option selections within some self test pages; enters and advances through the statistical data mode; and resets the machine's internal progressive parameters (as applicable) after a jackpot.

retail site An establishment where gaming machines are played. This term is also synonymous with location, venue, and retail location.

RISC *Reduced Instruction Set Computer* A type of central processing unit that usually has a smaller number of instructions that can be completed in 1-2 clock pulses.

ROM *Read-Only Memory* Memory whose contents can be read but not changed; used for storing firmware.

royal flush A poker game hand consisting of a 10, Jack, Queen, King, Ace of the same suit.

RS-232 A common standard for serial data communication interfaces.

RS-232 cable Any cable that is wired in accordance with the RS-232 standard.

RS-422 A standard for serial data communication interfaces, different from the RS-232 standard in its electrical characteristics and in its use of differential pairs for data signals.

RS-485 The electrical interface for a high-speed serial port.

SAMS *Security Accounting Management System* A system that provides a secure environment to operate the electronic gaming devices at a remote location.

SAS *Slot Accounting System* A data collection and accounting package developed by IGT. Data on machine activity is transmitted to a controller which, in turn, transmits the collected data to a computer.

scanner *See* ***handheld terminal.***

schematic An abstract representation of a complex device or concept, such as an electrical schematic.

screen button The graphical representation of a button drawn on the video screen simulating the function of a physical button when the screen is touched within the screen button boundary.

scrolling The vertical or horizontal movement of information (text or graphics) on a display screen in order to display additional information.

SDS *Slot Data System* An accounting system product of Bally Manufacturing.

self test mode The software mode that allows processor board input and output tests and enables option selections.

self test switch A service control switch that enters and advances through the self test mode, and enables data transfer between the CMOS RAM and EEPROM chips.

Semi-Euro credit A credit mode where coins may only be inserted up to the maximum bet amount. Any single win greater than the hopper limit is hand paid. A win that would cause the credits meter to exceed the credit limit is hopper paid. All other wins are paid to the credit meter. The credit limit is fixed at 9999.

SENET *Synchronous Expansion Network* An IGT proprietary I/O controller capable of handling 256 inputs and 256 outputs (switches, lamps). An auxiliary multiplexed channel providing 2,048 additional outputs.

serial communication Data communicated over a single-path communication line, one bit at a time.

serial interface An interface driver that controls communication via serial ports, between application and serial peripheral devices.

serial number The machine serial number which is stamped into the serial number tag on the outside of the machine.

service light (candle) A light assembly that mounts either on top of the machine or in a remote location and indicates various machine modes and game conditions. Most service lights have two or more "stages", or sections, stacked vertically.

seven-segment display An illuminated display device that is composed of seven separate straight bars of light that displays the digit "8" when illuminated.

shelf wheel A round metal disc attached to the hopper pinwheel. The shelf wheel is used to characterize the pinwheel for a specific coin size range. Changing from one denomination coinage to another usually requires changing the shelf wheel.

side eject hopper The standard type hopper in most upright gaming machines that ejects coins in a sideward direction.

single/double progressive Refers to the progressive operations of one or two top awards. Single progressive allows only the top award to be progressive. Double progressive allows the top two awards to be progressive.

SIS *Slot Information System* A data collection package that enables the owner/operator of machines to keep information on players, as well as accounting information and statistical information related to machine events.

site An establishment where gaming machines are played. This term is also synonymous with location, venue, retail site, and retail location.

site ID A number used by the system to identify a location data record based on the ADSC, modem and CCOM numbers.

slant top A type of machine with a slanted top from which the game is viewed while the player is typically seated.

slave monitor board A processor board that controls the video functions of the upper monitor in a dual-monitor machine or module.

slot game A type of machine that utilizes spinning slot reels or a video simulation of reels. A win occurs when reel symbols line up in a specified manner.

slot handle An optional handle located on the right side of a slot machine. Pulling the handle after a wager causes the reels to spin.

Slot Information System (SIS) A data collection package that enables the owner/operator of machines to keep information on players, as well as accounting information and statistical information related to machine events.

slot reel The part of a slot machine that holds one reel strip and spins. Machines generally have three or more independent slot reels.

SMART card reader A device, connected to a workstation computer, that reads player or employee cards and allows access to player or employee records for display or update.

SMART System *Slot Marketing And Revenue Tracking* To change software or hardware actions by changing settings. Modular system that is capable of providing player tracking,automating the accounting of a slot department, strengthening casino slot security and defining marketing targets.

SMIB *Slot Machine Interface Board* A device containing logic and interface boards inside the card box or gaming machine. These boards store machine data until polled by the DCU.

soft count The counting of money generated by gaming operations in the form of paper bills.

soft drop The controlled process of removing bills from bill acceptors located in gaming machines.

soft meter An internal accounting system that can be displayed on the screen of a video machine, or in the coin window on a reel slot machine. The signals that increment or drive the hard meters are derived from the soft meter data, and the soft meters are resettable to zero.

solenoid An electromagnetic device used to convert electrical energy into mechanical energy. The solenoid consists of a coil which, when energized, becomes a magnet. The magnet then causes a metal component to move in order to activate a mechanical device.

spectrum display A dot-matrix, multi-color display device used to display the amounts in a progressive system.

SSR *Solid State Relay* A relay built primarily from integrated circuits and other electronic systems containing moving parts as part of their prime functions.

stand The wood or metal base, housing the drop box, to which a standard upright machine is attached.

standalone progressive A progressive game played for a prize amount that can only be won on one machine.

Standard Euro credit A credit mode where once the maximum bet is reached, all inserted coins are accumulated as credits in the credits meter up to the credit limit. A win that would cause the credits meter to exceed the credit limit is hopper paid. If this hopper pay amount is greater than the hopper limit, the amount is hand paid. All other wins are paid to the credits meter. The credit limit is set in self test.

statistical data mode The software mode that displays statistics accumulated in the game play mode, such as the number of coins in or the number of credits won.

stepper motor A motor used for precision motion control. Stepper motors rotate by applying a pulsating voltage to their windings. Each pulse causes the stepper motor shaft to rotate only a few degrees.

straight flush A poker game hand consisting of five cards of the same suit with consecutive values.

subdirectory A directory within a directory.

super cap The large capacitors, C14 (.22F) on the SMIB logic board, and C26 (.47F) on the DCU board, which act as battery backup to RAM. They can maintain RAM up to seven days.

synchronous The ability to perform two or more processes at the same time controlled by a mutual timing signal or clock.

synchronous transmission A data transmission in which the bits are transmitted at a fixed rate. The transmitter and receiver both use the same clock signals for synchronization.

tape backup A mechanism that reads and writes information on magnetic tape to provide a copy of user's data in case of an accident.

telecommunication Transmitting information across varying distances, such as over telephone lines.

Telltale-Plus The circuitry which allows the machine to determine if any of the high security doors, including the main door, and processor board on the machine were opened while the power was turned off.

terminal The main console (keyboard and screen) of a system.

terminator A component used at the end of a daisy-chain cable run to complete the circuit.

theoretical hold The percentage of each credit that the machine will keep as gross profit.

tilt An error in machine operation that suspends game play. Tilts can be caused by hardware or software problems and must be corrected before game play can continue.

Token credit A credit mode only available when the appropriate set chip has been used to select the credits per coin (token) amount. By selecting a non-zero number for the credit amount, the token credit mode can be selected in self test, while selecting a zero disables the credit mode. If the game was in token credit mode before using the set chip to change the credit amount to zero, the game defaults to Montana-style credit mode when powered up. (Refer to Montana-style credit.)

top box An enclosed area at the top of the machine that typically contains a light box and display glass, a candle and/or various optional assemblies.

top glass A silkscreened piece of glass that fits into the top part of a game and usually shows the pay table.

top panel The main machine door on flat-top and slant-top machines. The top panel typically contains the player switches and/or other player input devices, coin entry, coin tray, video or slot glass and other components.

touch panel A player input device on some video games, such as touch-panel keno. When the player touches a designated area on the panel, a corresponding area on the video screen is activated.

touchscreen A video monitor that also acts as an input device by the action of touching specific locations of the screen to perform some activity or action.

touchscreen button The graphical representation of a button drawn on the screen simulating the function of a physical button when the screen is touched within the screen button boundary.

transaction processor engine (TPE) A set of programs that monitor and control the machines and are responsible for coordinating prize amounts, accumulating group meters, gathering game meters data and ensuring the integrity of the system.

transistor-transistor logic (TTL) 1) A family of integrated circuits having bipolar circuit logic. 2) A standard for interconnecting such circuits, which defines the voltages used to represent logical 0s and 1s.

translator Compatibility buffer between ABS and IGS.

twisted-pair wire A type of wire that is made up of 4 to 8 copper wires. Each wire is twisted around each other to deflect outside interference. There are two varieties shielded twisted pair and unshielded twisted pair.

UART/DUART *Universal Asynchronous Receiver/Transmitter* and *Dual Universal Asynchronous Receiver/Transmitter* These are integrated circuits that are used to communicate data from gaming machines to various accounting and security systems. The UART is a single device, i.e., one per package. The DUART is a dual device, i.e., two per package.

unit of credit One unit of credit is equivalent to one unit of the base denomination associated with the game.

upright machine A type of machine that stands erect, usually attached to a stand. The machine door is hinged on the side and the game is viewed from the front.

Vacuum Fluorescent Display (VFD) A small graphic display used to convey game play, diagnostic, status and other messages to the player, attendant or operator.

VBatt Battery voltage.

Version 1 CVT The term used to refer to CVTs that are connected to video/reel machines with hoppers.

Version 2 CVT The term used to refer to CVTs that are connected to video/reel machines with ticket printers.

VGD *Video Gaming Device* A gaming machine. This term is also synonymous with EGM, machine, gaming machine, VGM and VLT.

VGM *Video Gaming Machine* A gaming machine. This term is also synonymous with EGM, machine, gaming machine, VGD and VLT.

video monitor A display device similar to a television screen used in video games to receive and display game and service information.

Vin Voltage in.

virtual reel The term used for electronic slot machines in which the number of reel stops in the computer program is greater than the number of stops on the actual reels of the machine.

VLT *Video Lottery Terminal* A type of game that is connected to a central computer system via a communications system. Video lottery customers often receive payment in the form of printed tickets that can be redeemed for cash.

voucher A printed ticket from a video lottery terminal (VLT) which is redeemed for cash in lieu of direct payment as with a gaming machine.

Vout Voltage out.

WAN *Wide Area Network* A network of geographically distant computers and terminals.

wand *See **handheld terminal**.*

WAP System *Wide Area Progressive System* A group of progressive games that are played for a prize amount funded by the controlling agency. Refers to games such as Megabucks® and Quartermania®.

wide area network (WAN) A network of geographically distant computers and terminals.

win Usually refers to the dollar value of a gaming machine's hold percentage. It is calculated by multiplying the coin-in value in dollars times the hold percentage.

window A portion of the video display area dedicated to some specified purpose. Special software allows the screen to be divided into multiple windows that can be moved around and made bigger or smaller. Windows allow the user to treat the computer display screen like a desktop where various files can remain open simultaneously.

workstation 1) An individual work area that includes one or more devices on a network 2) A node through which a user can access a server or other nodes.