

Software Information Sheet



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General Information

Model Name:	WBA-12/13/14/15-SS/SU/SH/SS2/SH2/SU2/SS3/SH3/SU3				SW Req. No.	C19-347-04		A2736-04 / EO#3120	
SW. Name:	WBA-12/13(USA)-SS ID-044C				Date: (mm,dd,yyyy)	12.27.2007		Rev:	C1
SW. Version:	V3.75-05I				Note:				
Country (Code):	United States of America (USA)				Guide:	Type 1: 66mm			
Currency:	Dollar				Check Sum:	FE10			
					Kobetron ID:	5HC3			
Direction:	4-Way				CRC (Seed= 0000):	81E7			
Denomination: Years & MRI Ident #	Denomi.	Printed	Issued	MRI#	Denomi.	Printed	Issued	MRI#	
	1	-	-	USD1.1	20	'90~'95	-	USD20.1B	
	5	-	-	USD5.1A	20	'96~'01	-	USD20.2	
	5	'93~	-	USD5.1B	20	'04	'03	USD20.3	
	5	'99~	'00	USD5.2	50	90~93	-	USD50.1B	
	5	-	'06	USD5.3	50	96~	-	USD50.2	
	10	-	-	USD10.1A	50	04	04	USD50.3	
	10	'90~'95	-	USD10.1B	100	88~	-	USD100.1A	
	10	'99~	'00	USD10.2	100	90~93	-	USD100.1B	
	10	'04	'06	USD10.3	100	96~	-	USD100.2	
20	88~	-	USD20.1A						
ACCLOAD Program:	NEW ACCLOAD V1.17								
ICB:	ICB feature is enabled or disabled with an ICB Enable / Disable Barcode Ticket.								
Barcode Ticket:	Accepts JCM specified barcode tickets.								
EPROM (WBA-13/15):	4 Mbit, 90 nano-second data access, or faster. ST Part M27C4001-90 or equivalent								
Modifications:									
	<p>(Version 3.63-05I → 3.75-05I) – 01/2008</p> <ul style="list-style-type: none">Banknote Recognition: Added the next generation \$5 (2006 Series) notes. (Being released March 2008).Banknote Recognition: Added more data to improve acceptance of the \$10 (2003 series).Machine Operation: Improved sensor adjustment method to accommodate a wider range of sensor characteristics.ICB: If the Reset Command is received while writing to the ICB, Reset operation will be performed after the data has been completely written. <p>(Version 3.60-05I → 3.63-05I) – 06/2006</p> <ul style="list-style-type: none">Banknote Recognition: Added counterfeit countermeasures against \$100 “Supernotes”.Banknote Recognition: Added High Security \$100 DIP switch selection. High Security mode allows better rejection of "Super Note" type counterfeits. (Selecting High Security may affect the \$100 acceptance rate).Banknote Recognition: Improved recognition, all denominations.Banknote Recognition: Improved recognition - \$5 (1999 Series).Banknote Recognition: Improved recognition - \$10 (1999 Series).Banknote Recognition: Improved recognition - NexGEN \$10 (2004 Series).Banknote Recognition: Improved recognition - NexGEN \$20 (2004 Series).Machine Operation: DIP switch assignment change. \$50 / \$100 are now combined on DIP switch 6. DIP switch 7 is assigned to \$100 normal / high security.Machine Operation: Added cleaning mode routine. Acceptor recognizes a custom cleaning card and enters a cleaning mode. (Card is drawn 3 times).								

Modifications Cont:	<p>(Version 3.38-05I → 3.60-05I) – 02/2006</p> <ul style="list-style-type: none"> • <u>Banknote Recognition:</u> Added next generation \$10(Series 2004). • <u>Banknote Recognition:</u> Improved counterfeit \$100 detection. (1996, 2001, 2003 series) • <u>Banknote Recognition:</u> Improved counterfeit \$50 detection. (2001, 2003 series) • <u>Banknote Recognition:</u> Improved recognition of \$50 banknotes (2004 Series). • <u>Banknote Recognition:</u> Improved \$5 (1999, 2001, 2003 series) facedown recognition. • <u>Banknote Recognition:</u> Improved magnetic detection for \$1 banknotes in the reverse directions. • <u>Banknote Recognition:</u> Improved the security for \$5 and \$10 banknotes by improving the optical detection features. • <u>Machine Operation:</u> The pusher home sensor is monitored more closely during the push operation. (WBA will enter an error state if any abnormality is detected during this operation). • <u>Interface:</u> WBA checks for ICB components; if the ICB components are detected but ICB is disabled, then the WBA will report a hardware failure. • <u>ICB:</u> Added ICB feature check. (If ICB modules are installed and determined to be disabled, then report an error. (Failure 03). (Led will flash with a repeated error code). • <u>ICB:</u> Added banknote reject codes to ICB memory. • <u>ICB:</u> Added currency assignment table to ICB memory. • <u>ICB:</u> Modified ICB Cash Box Remove DATA/TIME to update every 30 minutes. <p>(Version 3.35-05I → 3.38-05I) – 04/2005</p> <ul style="list-style-type: none"> • <u>Banknote Recognition:</u> Counterfeit countermeasures: \$10. (Variation of the counterfeit addressed in version 3.35-05i was still accepted in a few cases). • <u>Banknote Recognition:</u> Similar countermeasures implemented for the \$10 bill were also implemented for \$5, \$20 and Next Generation \$20. (Pre-emptive change). • <u>Banknote Recognition:</u> Countermeasures for high quality \$50 and \$100 counterfeit notes found during evaluation at the Federal Reserve Bank. • <u>Machine Operation:</u> A \$5, \$10, \$20 banknote is drawn into the path. Following the usual inspection, if the banknote was inserted green seal first, the WBA will move the banknote about ¼ inch for a final check before sending the denomination message. <p>(Version 3.34-05I → 3.35-05I) – 03/2005</p> <ul style="list-style-type: none"> • <u>Banknote Recognition:</u> Counterfeit countermeasures: \$10. • <u>Machine Operation:</u> Motor Speed check method was adjusted. • <u>Banknote Recognition:</u> Improved \$20 (2004) banknote recognition. (Added more data). • <u>Machine Operation:</u> During Auto-calibration, the WBA will not listen to communication from the Host. <p>(Version 3.10-05I → 3.34-05I) – 08/2004</p> <ul style="list-style-type: none"> • <u>Banknote Recognition:</u> Added Next Generation \$50 banknote recognition. • <u>Banknote Recognition:</u> Improved \$50 recognition. (2001 series). • <u>Banknote Recognition:</u> Improved \$10 counterfeit detection. • <u>Banknote Recognition:</u> Counterfeit countermeasures: \$100 (Found in Japan and Taiwan). • <u>Interface:</u> Improved CPU runaway detection. A CPU run-away event will be detected within 200 ms and corrected. <p>(Version 3.01-05I → 3.10-05I) – 02/2004</p> <ul style="list-style-type: none"> • <u>Banknote Recognition:</u> Counterfeit countermeasures: \$5 • <u>Machine Operation:</u> Improved error checking. Software was changed to examine transport related errors more closely. The error must exist for at least 100 ms to be considered valid. <p>(Modifications since previous version 2.15-05I) – 08/2003</p> <ul style="list-style-type: none"> • <u>Banknote Recognition:</u> Added Next Generation \$20 recognition. • <u>Banknote Recognition:</u> Added more 2001 series \$50 data. • <u>Banknote Recognition:</u> Counterfeit countermeasures: \$1 found in California.
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Modifications Cont:	<ul style="list-style-type: none"> • Machine Operation: DIP-switch assignment change. \$50 / \$100 are no longer combined on DIP-switch #7. ICB enable / disable via DIP switch is no longer available. • Interface: Vend message is now sent after a bill completely passes the feed-out sensor. • ICB: ICB functions and features are now included as standard in the software. ICB is enabled / disabled via set ticket method. (Enable / Disable via DIP switch is no longer available). • ICB: ICB memory now includes data for acceptance rate calculation. • ICB: ICB cashbox counter allows for multiple insertion / removal events.
Memo:	

Dip Switch Settings

#	Dip Switch		
1	OFF	OFF	
	ON	RESERVED	
2	OFF	1	ENABLE
	ON	1	DISABLE
3	OFF	5	ENABLE
	ON	5	DISABLE
4	OFF	10	ENABLE
	ON	10	DISABLE
5	OFF	20	ENABLE
	ON	20	DISABLE
6	OFF	50/100	ENABLE
	ON	50/100	DISABLE
7	OFF	100	Normal Security
	ON	100	High Security
8	OFF	OFF	
	ON	TEST MODE	

CREDIT, STATUS CODE

Code (h)	Notes
81	\$1
82	Reserved
83	\$5
84	\$10
85	\$20
86	\$50
87	\$100
88	Reserved
89	Vend
8A	Return
8B	Reject
8C	Abnormal
8D	Stacker Full / Jam
8E	Cash Box Removed
8F	Attached Cash Box

DIRECTION DATA

Sample demonination:100	
<div> <div>A ←</div> <div>(FA)</div> <div> <div>100</div> <div>Front</div> </div> <div>→ B</div> <div>(FB)</div> </div>	
<div> <div>D ←</div> <div>(BB)</div> <div> <div>Back</div> <div>100</div> </div> <div>→ C</div> <div>(BA)</div> </div>	

ACCEPT BILL TIMING DIAGRAM

