

ANALYSIS CHART
MODEL 28 & 35
AUTOMATIC KEYBOARD

LAK /AC

REVISIONS

ISSUE	DATE	AUTH. NO.
// II	7-7-64	82845

I. FEATURESA. Signal Characteristics

1. Unit of Code Transmission
 - a. 5 Level - 7.00 Unit Code - usual top speed
642.8 OPM 75 Baud
 - b. 5 Level - 7.42 Unit Code - usual top speed
600 OPM 74.2 Baud
 - c. 5 Level - 7.50 Unit Code - usual top speed
600 OPM - 75 Baud
 - d. 8 Level - 11.00 Unit Code - usual top speed
600 OPM 110 Baud
2. Perforator Drive Speed
 - a. 685.7 OPM
 - b. 900 OPM
3. Reperforator Drive Speed
 - a. 600 OPM
4. Transmitter Contact Suppressor
 - a. ARC only
 - b. R.F. Noise
5. Polarity of Signal
 - a. Neutral
 - b. Polar
6. Synchronous Pulsed Transmission
 - a. 50 MA. Magnet
 - b. 100 MA. Magnet
7. Parity
 - a. Mark I
 - b. Mark II

B. Keyboard Lock

1. Electrical (Send and Receive Keytops)
(Controllable by the stunt box)
2. Electrical (Form & RMKS Keytops)

C. AUX. Control Switch & Housing

1. Complete (K-KT-T)
2. Complete (KT-K)
3. Housing only (D)
4. Complete (K-KT-T-TTS-TTR)

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ANALYSIS CHART
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RD. FILE NO. 2-A65A47

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ENGD. JDB APPD. JJJ

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D. Operational Features

1. Electrical Signal Line Break (BREAK Keytop) (B)
2. Repeat Character
3. Local Carriage Return
4. Local Line Feed
5. Margin Indicator Switch
6. Repeat Space
7. Paper Feed-Out Motor Start (C)
8. Local Backspace
9. Local Reverse Line Feed
10. Time Delay Motor Stop Mechanism
11. Tape Container (2" Core)
12. Tape Container (1" Core)
13. Low Tape Switch
14. Tape Backspace
15. Character Counter
16. 2 Pushbutton Switches - Normally Open
(1 for TD Start; 1 for Telephone to Teletype)
17. 1 Pushbutton Switch - Normally closed
(Teletype to Telephone)
18. 1" Tape Reel Core
19. Code Reading Contacts
20. Keyboard Aux. Contacts
21. Letters & Figures Contacts & Code Bars
22. Special Illuminated Pushbutton Switches
23. Special Keyboard Assembly
24. Intermediate Gear Assembly (J)
25. Bearing Bracket Assembly (J)
26. Low Paper.
27. Answer-Back Mechanism
28. 50 Pin Connector
29. Universal Contact
30. Break Reset Switch
31. Character Counter Solenoid
32. Signal Regenerator Timing Contact
33. Left Backspace - Note y
34. Right Backspace - Note y
35. Signal Generator Contact for Signal Reshaping
36. Auxiliary Contact
37. Non-Contention Switch
38. Gold Plated Signal Generator Contacts

E. Functional Keytops

1. Loc. L.F.
2. Rec. & Send
3. Local & Send
4. Break (Signal Line)
5. Loc. R. L.F.
6. ECM
7. SCM, EOA, Feed Out & Rub Out
8. Tape B. SP.
9. Loc. B. SP.
10. Rept.
11. Loc. C.R.
12. Here Is
13. Feed Out

F. Hood and Seal Plate

1. For Cabinets (LAC) (LBAC)
2. For Covers (LAC)
3. For Hood (LAC)

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II. NOTES

- A. Refer to E.S.I. 4.002-28 & 35 for conversion of Teletype to Bell Codes. Refer to E.S.I. 4.007 for cross reference of maintenance kits and modification kits and associated 5000S and 6000S Series Specifications.
- B. Wiring is part of keyboard cable when factory installed. Modification Kit 154141 Furnished for field use only.
- C. Wiring is part of keyboard cable when factory installed. Modification Kit 154147 Furnished for field use only.
- D. Switch furnished by W. U. (Plan 55)
- E. LAK1 is an inoperable basic keyboard.
- F. LAK23 is equipped with 164502 Answer-Back SOP.
- G. Special elect. switches - LAK0 only.
- H. LAK20 used to drive LARP801. Signal Generator present, but not used.
- J. Special gear noise - reduction parts.
- K. LAK23 - Part of VCL229 (Complete set VSL239)
- L. LAK20 - Part of VCL227 (Complete set VSL235)
- M. LAK25 & 26 are same as LAK4 & 6 resp. except for 174350 Counter Code Bar in place of 158107, to permit operation of counter when blank key is used during preparation of tape.
- N. LAK38 is part of VCL279 and is not for general application.
- P. In LAK35 & 26 the trans. dist. will operate in the K-KT-T positions.
- R. LAK28 is wired to blind the selector magnet of the keyboard reperforator in the IT & T portion of the keyboard selector switch.
- S. LAK27 does not have bracket or gears for driving the LPE. It also has remote controlled gear shift, operable under power.
- T. On LAK41 local backspace operates the perforator as well as the typing unit.

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- U. LAK41 has extreme R.F.I. filtering and the sync. pulse magnet (50 MA.) is used for keyboard lock.
- V. LAK44 is the same as LAK4, except it has two special switches used in the 83B3 Switching System.
- W. LAK46 is the same as LAK42 except it is equipped with gears for operation with 50 cycle, 3000 RPM synchronous motor.
- X. LAK800 and 801 operate using IBM705 Code and are not compatible with other eight level codes.
- Y. Left backspace operates the reperforator whereas right backspace operates the printer and reperforator.
- Z. LAK805 is a parallel output keyboard and has parallel contacts in place of signal generator contacts.
- AA. This keyboard generates even parity and the new ASCII escape Code per mutation: 11011000
- AB. LAK 47 IS THE SAME AS LAK 33 EXCEPT; UNIT AS FURNISHED IS WIRED FOR "MARKING" CONTACTS NEGATIVE (-) "SPACING" CONTACTS POSITIVE (+). TO REVERSE POLARITY, SEE APPLICABLE WD.

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III. INDIVIDUAL UNIT FEATURES

REVISIONS		
ISSUE	DATE	AUTH. NO.
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LAK Code	Orig. Cust.	WD'S	60003 or 600003	Photograph No.	Features and Notes ()
LAK1	Basic		6155S		Alb, 2b, 4a, 5a-D2, 3, 4, 5, 11-El, 10, 11-F1 (E)
LAK2	Navy	3261	6155S		Alb, 2b, 4a, 5a-El-D2, 3, 4, 5, 11, 13, 14, 15-El, 8, 10, 11-F1
LAK3	Basic	3262	6155S		Alb, 2b, 4a, 5a-B1-C1-D1, 2, 3, 4, 5, 11, 12, 14, 15-El, 2, 4, 8, 10, 11-F1
LAK4	Basic	3302	6155S		Alb, 2b, 4a, 5a-B1-C1-D1, 2, 3, 4, 5, 6, 11, 14, 15-El, 2, 4, 8, 10, 11-F1
LAK5	Cancelled				
LAK6	Cancelled				
LAK7	Western Union	3458	6155S		Alb, 2b, 4a, 5a-B1-C3-D1, 2, 3, 4, 5, 7, 11, 13, 14, 15-El, 2, 4, 8, 10, 11-F1
LAK8	Cancelled				
LAK9	N.B. CO.	3636	6155S		Alb, 2b, 4b, 5a-B1-C1-D1, 2, 3, 4, 5, 10, 11, 14, 15-El, 2, 4, 8, 10, 11-F1
LAK10	Bell	3673	6155S		Alb, 2b, 4a, 5a-B1-C2-D1, 2, 3, 4, 5, 6, 11, 14, 15-El, 2, 4, 8, 10, 11-F1
LAK11	Signal Corps	3724	6155S		Alb, 2b, 4b, 5b-B1-C1-D1, 2, 3, 4, 5, 11, 14, 15-El, 2, 4, 8, 10, 11-F1
LAK12	Cancelled				

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III. INDIVIDUAL UNIT FEATURES (Continued)

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LAK Code	Orig. Cust.	WD'S	60COS or 6000S	Photograph No.	Features and Notes ()*
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LAK13 Cancelled

LAK14 Cancelled

LAK15 Cancelled

LAK16	N.Y. Tel.	3772	6155S		Alb, 2b, 4a, 5a- B1-C1-D1, 2, 3, 4, 5, 11, 14, 15, 16, 17-E1, 2, 4, 8, 10, 11-F1
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LAK17	North American Phillips	3767	6155S		Alb, 2b, 4a, 5a- B1-C1-D1, 2, 3, 4, 5, 11, 14, 15- E1, 2, 4, 8, 10, 11-F1
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LAK18	N.S.A.	3802	6155S		Alb, 2a, 4b, 5b- B1-C1-D2, 3, 4, 5, 11, 13, 14, 15 E1, 2, 4, 8, 10, 11-F1
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LAK19 Cancelled

LAK20	Delta	4213	60048S		Alb, 3a, 4a, 5a- D2, 3, 4, 12, 15, 19, 20, 21, 22, 23, 24, 25-E1, 6, 7, 8, 10, 11- F1 (G)(H)(L)
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LAK21	Philco	4263	6155S		Ala, 2a, 4b, 5b- Sheet 6 of 9 B1-D2, 3, 4, 5, 11, 13, 15-E1, 2, 10, 11-F1
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LAK22	U.S. Dept. of State	4708	6155S		Alc, 5b-C1-D1, 2, 3, 4, 5, 10, 15-E1, 3, 4, 8, 10, 11-F1
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LAK23	Western Union	4321	6155S		Alb, 2b, 4a, 5a- B1-C1-D1, 2, 3, 4, 5, 11, 13, 14, 15-E1, 2, 4, 6, 8, 10, 11 (F) (K)
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LAK24 Not Released

LAK25 Cancelled

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III. INDIVIDUAL UNIT FEATURES (Continued)

REVISIONS		
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LAK Code	Orig. Cust.	WD'S	6000s or 60000S	Photograph No.	Features and Notes ()
LAK26	FAA	3447	6155B		Alb, 2b, 4a, 5a-D2, 3, 4, 5, 11, 14, 15-El, 8, 10, 11-F1 (M)
LAK27	Boeing	4338	6155S		Alb, 2b, 4a, 5a-B1-C1-D1, 2, 3, 4, 5, 6, 11, 14, 15, 27-El, 2, 4, 8, 10, 11, 12, F1 (S)
LAK28	FAA	4748	6155S		Alb, 2b, 4a, 5a-B1-C1-D1, 2, 3, 4, 5, 6, 11, 14, 15-El, 2, 4, 8, 10, 11, 12-FL (R)
LAK29	Cancelled				
LAK30	Cancelled				
LAK31	U.S. NAVY	4927	6155S		Ala, 2a, 4a, 5a, 6a-B1-C1-D1, 2, 3, 4, 5, 8, 11, 14, 15-El, 2, 4, 8, 10, 11-F1
LAK32	Cancelled				
LAK33	U.S. Air Force	4263 & 4350	6155B	630522-14	Ala, 2a, 4b, 5b, 6a-B1-C1-D2, 3, 4, 5, 11, 13, 14, 15-El, 2, 4, 8, 10, 11, 12-F1
LAK34	G.S.A.	3636	60694 S		Alb, 2b, 4b, 5a-B1-C1-D1, 2, 3, 4, 5, 10, 11, 14, 15, 38-El, 2, 4, 8, 10, 11-F1
LAK35	U.S. Coast Guard	7169	6155S		Alb, 2b, 4a, 5a-B1-C1-D1, 2, 3, 4, 5, 6, 11, 14, 15-El, 2, 4, 8, 10, 11-F1 (P)
LAK36	U.S. Coast Guard	7169	6155S		Alb, 2b, 4a, 5a-B1-C1-D1, 2, 3, 4, 5, 6, 11, 14, 15-El, 2, 4, 8, 10, 11-F1 (P)
LAK37	Not Released				
LAK38	G.S.A.	7002	60758S		Alb, 2b, 5a-D1, 2, 3, 4, 11, 14, 15, 25-El, 4, 8, 10, 11-F1 (N)

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LAK Code	Orig. Cust.	WD'S	6000S or 60000S	Photograph No.	Features and Notes ()
LAK39	Bell	4915	6155S		Alb, 2b, 5a-B1-C1-D1, 2, 3, 4, 5, 6, 7, 11, 14, 15, 27-El, 4, 8, 10, 11, 12, 13-F1
LAK40	Bell	3673	6155S		Alb, 2b, 5a-B1-C1-D1, 2, 3, 4, 5, 6, 7, 11, 14, 15-El, 4, 8, 10, 11, 13-F1
LAK41	U.S. Govt.	6945	60763S		Ala, 2a, 4b, 5a, 6a-B2-C1-D2, 3, 4, 5, 8, 11, 12, 13, 14, 15, 23, 24, 25, 28-El, 9, 10, 11-F1 (T) (U)
LAK42	Navy	6456	6155S		Alb, 2b, 4a, 5a, 6a-B1-C1-D1, 2, 3, 4, 5, 11, 14, 15-El, 2, 4, 8, 10, 11-F1
LAK43	DCA	6504	6155S		Alb, 2a, 4b, 5a-D3, 4, 5, 11, 14, 15, 24, 28-El, 4, 8, 11-F3
LAK44	Bell	3302	6155S		Alb, 2b, 4a, 5a-B1-C1-D1, 2, 3, 4, 5, 6, 11, 14, 15, El, 2, 4, 8, 10, 11, F1 (V)
LAK45	DOOD	4263 & 4350	60,885S		Ala, 2a, 5b, 6a, -B1-C1-D2, 3, 4, 5, 11, 13, 14, 15, 38-El, 2, 8, 10, 11-F1
LAK46	Navy	6456	6155S		Alb, 2b, 4a, 5a, 6a, -B1-C1-D1, 2, 3, 4, 5, 11, 14, 15-El, 2, 4, 8, 10, 11-F1 (W)
LAK47	USAF	4263 & 4350	6155S		Ala, 2a, 4b, 5b, 6a - B1 - C1 - D2, 3, 4, 5, 11, 13, 14, 15 - El, 2, 8, 10, 11-F1 (AB)

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LAK Code	Orig. Cust.	WD'S	6000S or 60000S	Photograph No.	Features and Notes ()
800					Not recommended for general use - See Note X
801	"	"	"	"	" " " "
802					Cancelled
803	Bell (WADS)	5811	6932S		Ald, 3a, 5a, C4-D2, 3, 4, 11, 15, 29, 32, 33, 35, 37-E1, 8, 10, 11
804	Bell (WADS)	6479	6932S		Ald, 3a, 5a, 7b-C4-D2, 3, 4, 5, 11, 15, 29, 31, 32, 33, 35, 37, 38-E1, 8, 10, 11
805	Bell of Canada	6454	60730S		Ald, 3a, 4a, 5a, 7b-C4-D2, 3, 4, 5, 11, 19, 30, 34, 36-E1, 10, 11
806	Bell	6395	6932S		Ald, 3a, 4a, 5a, 7b-B1-C4-D2, 3, 4, 5, 8, 11, 15, 30, 31, 32, 38-E1, 2, 9, 10, 11
807					Cancelled
808	DCA	6504	6932S		Ald, 3a, 4b, 5a-C4-D2, 3, 4, 11, 15, 29, 32, 33, 35, 37, 38-E1, 8, 10, 11
809					Cancelled
810	Western Union	6395	6932S		Ald, 3a, 4a, 5a, 7a, -B1-C4-D2, 3, 4, 5, 8, 11, 15, 30, 31, 32, 38-E1, 2, 9, 10, 11
811	Bell	6479	60,869		Ald, 3a, 5a, 7b, C4, D2, 3, 4, 5, 8, 11, 15, 29, 31, 32, 33, 35, 37, 38, E1, 9, 10, 11 (AA)

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