

H.E.S. No. 4
TELEPHONE INTERCOM. No. 4/1...

NOTES:—

- At main station strap between Terminals T34-T35 must always be removed. At other stations this strap may be left insitu to provide the facility of cutting off the bell, or moved to Terminals T33-T34 to short circuit the bell. A maximum of five stations may have bells in circuit
- Diagram shows cord connexions to telephone when issued. When installing telephone the appropriate station pair eg. pair number corresponding to the station number, should be transferred on telephone terminal tablet as follows:—

STATION NUMBER	COLOUR OF CONDUCTOR	FROM TERMINAL	TO TERMINAL	COLOUR OF CONDUCTOR	FROM TERMINAL	TO TERMINAL
1	O-BN	T44	T21	W	T43	T20
2	O-S	T46	T21	W	T45	T20
3	G-W	T48	T21	W	T47	T20
4	G-BN	T50	T21	W	T49	T20
5	G-S	T52	T21	W	T51	T20
6	BN-W	T53	T21	W	T54	T20
7	BN-S	T55	T21	W	T56	T20
8	S-W	T57	T21	W	T58	T20
9	B	T59	T21	Y	T60	T20
10	O	T61	T21	Y	T62	T20

- At stations which require an internal call signal when holding an exchange line shift strap between Terminals T3-T4 to Terminals T2-T3, strap station B-wire, i.e. at Station 1 Terminal T44, to Terminal T21.
N.B. This facility cannot be provided on installations with an 11th station
- The diagram shows, arrangement of straps between Terminals T68-T69-T70, to provide 'earth loop' operator recall. When 'earth one line' operator recall is required remove strap between Terminals T68-T69, (T68-T70 if repertory dialler is fitted)
- On CB telephones the dial is omitted, the pink and orange conductors joined
- When reversed in jack the regulator connects B,C and D together and is rendered inoperative
- Keys 4KL-10KL wired similarly to Keys 1KL-3KL
- Contacts KCL operate when Keys 1KL, 10KL are fully depressed
- Key KC operates on subsequent overpress of Keys KXA and KXB
- On MK1 Teles, R5 was 680Ω, R8 & R9 were 1.2K, LP1-4 were Lamps No.41E, KBI was Part 1/DSP/3126 & L1 was T1 (Transformer No.514A)
- On MK1, MK1A and early issues of MK2 Telephones KXA1 and KXB1 are 'k' action spring-sets. Telephones manufactured after 1970 have a make spring-set plus a break spring-set with the break contact adjusted to open after the make contact has closed

- At stations where a repertory dialler is required, modify telephones in accordance with Fig.2 When repertory dialler is recovered provide Strap T69-70.
- Straps are terminated on the underside (cordside) of the 72-way block terminal. Screws are not provided in Terminals T21, 22, 23, 36-62 on the instrument side of this block terminal for telephones manufactured after 1971.
- MK2 telephones manufactured before 1974 have CS3 springset connected between T67 and KXA21.
- MK1A and MK2 Telephones may be issued with a Telephone Unit D93602 fitted in place of the original P.C.B. and RX1 (click suppressor) should not be fitted to the terminals of the receiver in the handset. The connexions to the Telephone Unit are shown on the diagram for the MK3 version of the telephone (Page 6)
- Buzzer No.33A may be fitted in place of Buzzer No.2B-3. The connexions to the Buzzer No.33A are shown on the diagram for the MK3 version of the telephone (Page 6)

TELEPHONE INTERCOM No. 4/1 MK1, MK1A, MK2 & MK3

APPARATUS SCHEDULE	
CODE	ITEM
B	BELL No.59A-2
BZ	BUZZER No. 2B-3 OR BUZZER No.33A WITH PART 1/DCL/575
C2	CAPACITOR No. 8017B 0.047 μF
LINE CORD	CONNECTOR No. 1046A COLOUR
HANDSET CORD	CORD, INST. No. 4/118AX COLOUR, 200mm
D	DIAL, AUTOMATIC No. 21FA
LP1-LP4	LAMP No. 41C (NOTE 10)
KBI	SWITCH No.5A-4
R	RECEIVER-INSET No.4T
RX1	RECTIFIER ELEMENT No. 205 (NOTE 15)
REG	REGULATOR No.1 (EXCEPT TELEPHONES FITTED WITH A TELEPHONE UNIT)
R3, R4	RESISTOR, COIL No. 35A 200Ω
R5	RESISTOR, COIL No. 40 430Ω
R6, R7	RESISTOR, COIL No. 35A 100Ω
R8, R9	RESISTOR, COIL No. 35A 200Ω
R10, R11	RESISTOR, COIL No. 40A 390Ω
L1	INDUCTION COIL No. 205A (NOTE 10)
T	TRANSMITTER-INSET No.16
TU	TELEPHONE UNIT D93602 FITTED TO MK3 TELEPHONES AND SOME REPAIRED MK1A & MK2 TELEPHONES

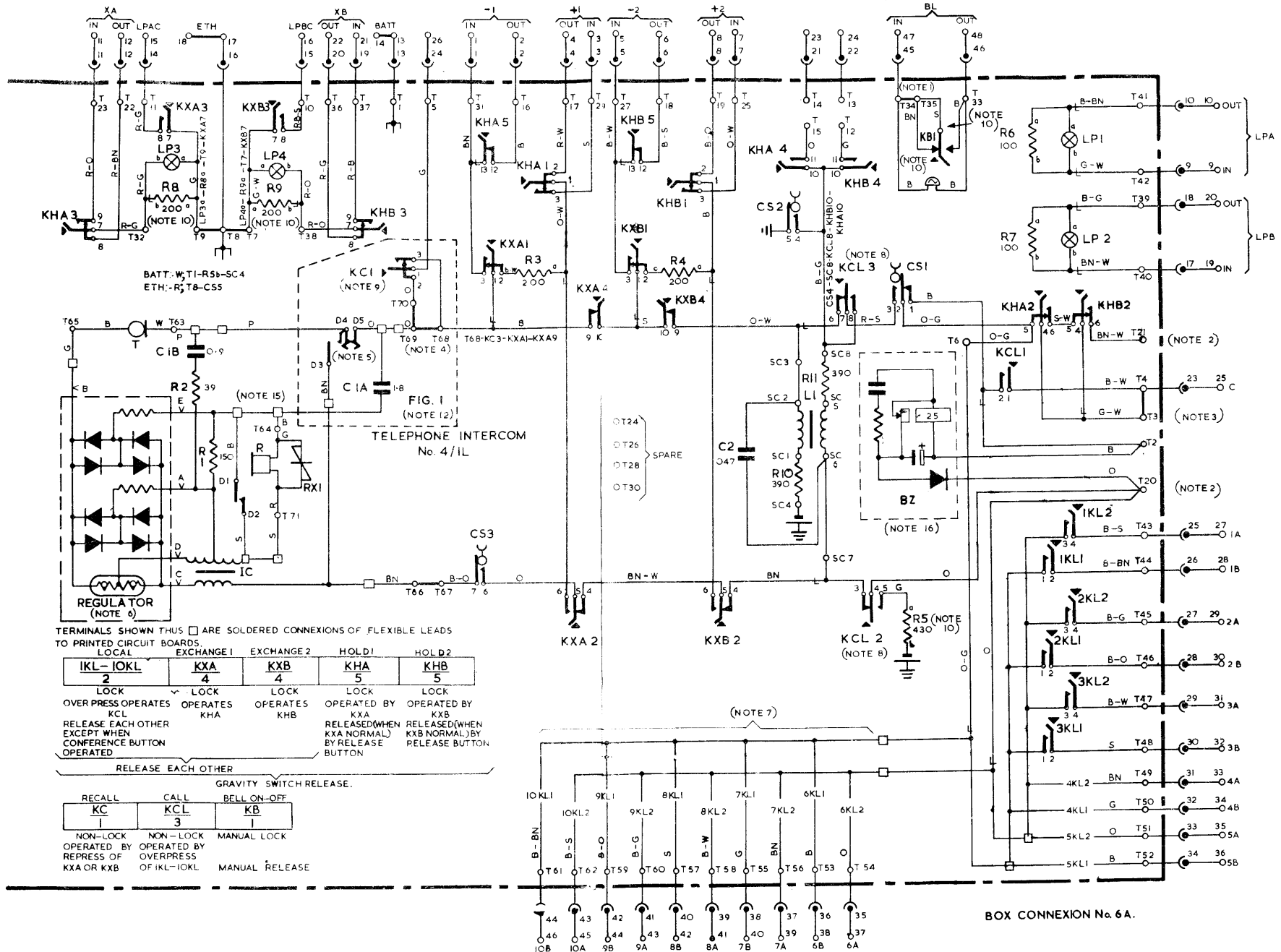
NUMBERING OF SPRINGS FOR
TELEPHONE INTERCOM. No. 4/1 MK2
VIEWED FROM CONTACT
END OF SPRING-SET

7	—	27
6	—	26
5	—	25
4	—	24
3	—	23
2	—	22
1	—	21

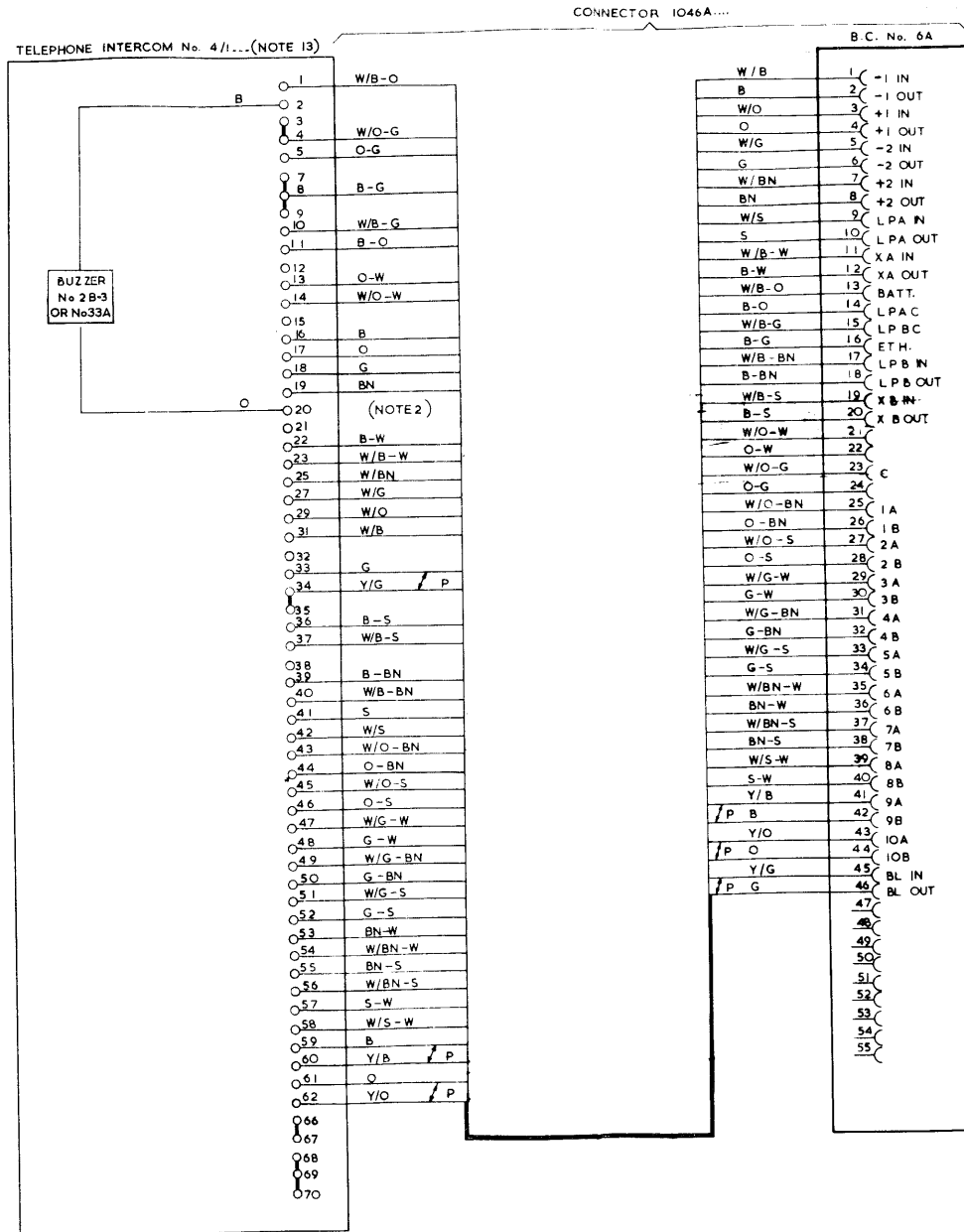
PLUNGER

PO TELCOMMS HQRS	ISSUE			
PAPER:— W		J	MK3 TELE (PAGE 6) AND NOTES 15 & 16 ADDED	T D 7-2-1 11-3-76
DISTN:—		H	CS3 SPRINGSET ON MK2 REPOSITIONED. NOTE 13 AMENDED. NOTE 14 ADDED	17-2-75
GENERAL		G	REDRAWN. NEW FORMAT. LP3 & LP4 MINOR AMENDMENTS.	T D 7-2-1 19-1-73
		F	REDRAWN. NOTE 11 AMENDED. FIG 2 & NOTES 12 & 13 ADDED.	T D 7-2-1 1-5-72

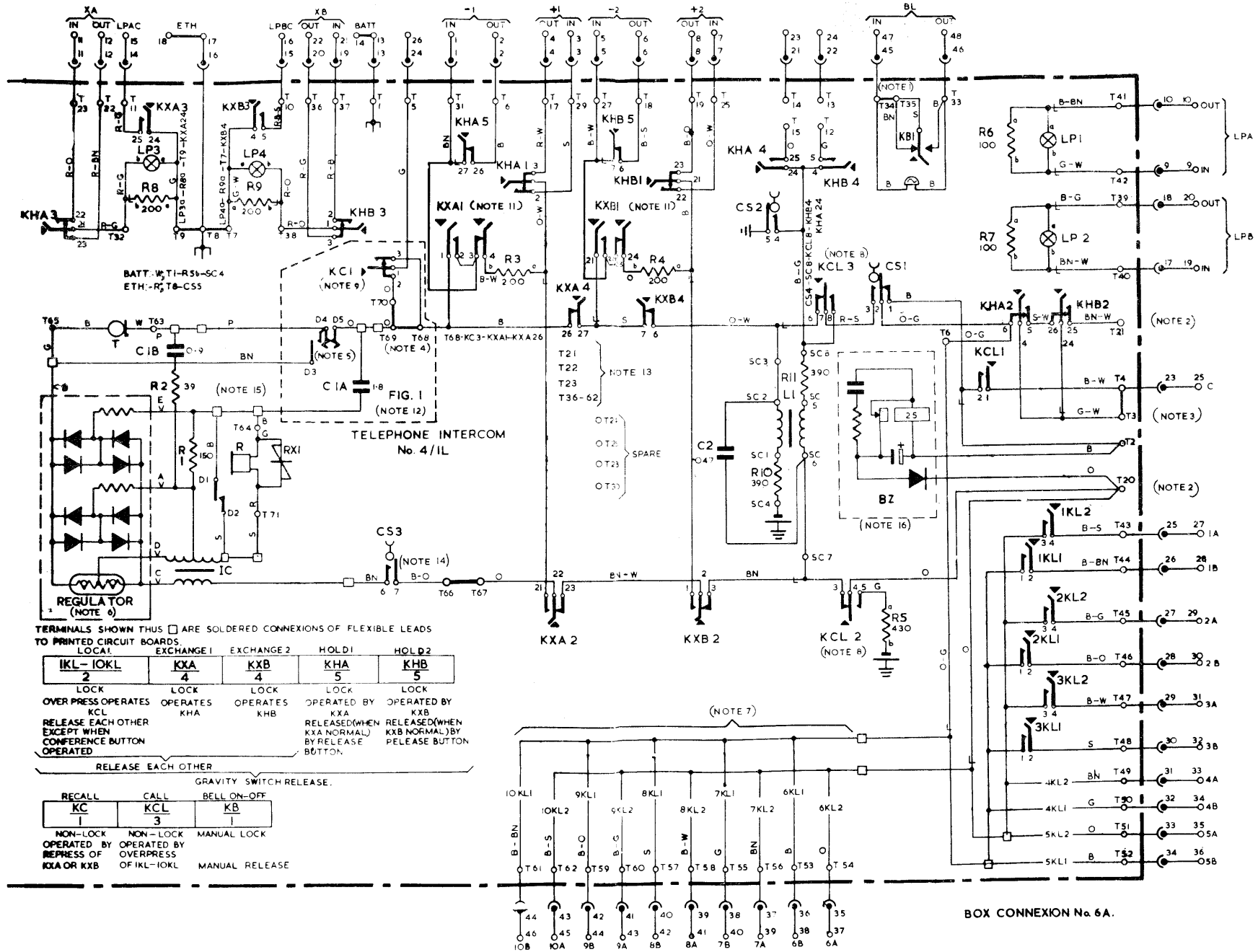
H.E.S No. 4 TELEPHONE INTERCOM No. 4/1 MKI & MKIA.



CORD CONNEXIONS, FOR TELEPHONE INTERCOM, No. 4/1.MK1, MK1A, MK2 & MK3



H. E. S. No.4
TELEPHONE INTERCOM No. 4/1---MK2



TERMINALS SHOWN WITH ARE SOLDERED CONNEXIONS OF FLEXIBLE LEADS TO PRINTED CIRCUIT BOARDS

LOCAL	EXCHANGE 1	EXCHANGE 2	HOLD 1	HOLD 2
IKL-IOKL 2	KXA 4	KXB 4	KHA 5	KHB 5
LOCK	LOCK	LOCK	LOCK	LOCK
OVER PRESS OPERATES KCL	OPERATES KHA	OPERATES KHB	OPERATED BY KXA	OPERATED BY KXB
RELEASE EACH OTHER EXCEPT WHEN CONFERENCE BUTTON OPERATED			RELEASED WHEN KXA NORMAL BY RELEASE BUTTON	RELEASED WHEN KXB NORMAL BY RELEASE BUTTON
RELEASE EACH OTHER				
GRAVITY SWITCH RELEASE:				
RECALL KC 1	CALL KCL 3	BELL ON-OFF KB 1		
NON-LOCK OPERATED BY REPRESS OF KXA OR KXB	NON-LOCK OPERATED BY OVERPRESS OF IKL-IOKL	MANUAL LOCK		
		MANUAL RELEASE		

BOX CONNEXION No. 6A.

