

SPEED CALLING FEATURE FEATURE DOCUMENT 1 AND 1A ESS™ SWITCHES

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6. SUPPLEMENTARY INFORMATION	15	1.01 The <i>Speed Calling</i> feature allows a customer to assign abbreviated 1- or 2-digit codes to certain frequently called numbers. The establishment of these codes permits dialing to the selected numbers using fewer digits than normally required.	
7. COMMENT FORM	16	1.02 The <i>Customer Changeable Speed Calling Enhancement</i> provides the ability for customers to assign abbreviated codes directly from their own phones.	
8. ISSUING ORGANIZATION	16	REASON FOR REISSUE	
Figures		1.03 This document is reissued to:	
1. Parameter Word R2QUST and Recent Change Queue	7	(a) Include information concerning access codes 74/75.	
2. Line Equipment Number and Remote Equipment Number Auxiliary Blocks	8	(b) Incorporate the addendum.	
3. Multiline Hunt Group Common Block	11	(c) Convert to the standard format.	
4. LEN Primary Translation Words and Auxiliary Blocks	12	(d) Make other minor corrections.	
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AVAILABILITY

1.04 The Speed Calling feature is available in all active generic programs. Speed Calling is a base loaded feature. Two-digit individual speed calling for Centrex/ESSX-1 customers is initially available with the 1AE7 generic program (1A ESS switch only). Carrier interconnect is initially available with the 1E8/1AE8 generic program.

FEATURE GROUPS

1.05 Not applicable.

FEATURE ASSIGNMENT

1.06 The 1- and/or 2-digit Speed Calling features are provided on an individual (per station) and a group basis. The customer changeable speed calling option is provided on a per line basis.

2. USER PERSPECTIVE

USER PROFILE

2.01 The user of this feature may be a residential or business subscriber including Centrex/ESSX-1 customers.

2.02 Dialing patterns which can be assigned to speed calling codes are shown in Table A.

CUSTOMER

2.03 Individual POTS (plain old telephone service) lines can have 1- and/or 2-digit speed calling on an individual or shared basis. Where speed calling is provided on a shared basis, one line is designated as the owner. A POTS 2-party line can have 1- or 2-digit speed calling on an individual or shared basis. A POTS MLHG (multiline hunt group) can have 1- or 2-digit speed calling on a group basis.

2.04 Centrex/ESSX-1 lines can have 1-digit individual or shared speed calling and/or 2-digit group speed calling. Effective with the 1AE7 generic program (1A ESS switch only), Centrex/ESSX-1 lines can also have individual or shared 2-digit speed calling. Functionally, 2-digit group and individual speed calling lists are similar. One exception to this is that more than one station can be designated the owner of a group list, thus being allowed to make changes to the speed calling list.

2.05 A MLHG can have 1- or 2-digit speed calling on a MLHG basis. Terminals within a MLHG can be assigned speed calling as if they were individual POTS or Centrex/ESSX-1 lines. When both individual (or shared) and MLHG speed calling applies, the individual (or shared) assignment takes precedence. Group and/or individual (or shared) speed calling is also assignable to nonhunting terminals within a MLHG. Speed calling on a MLHG basis is not available to nonhunting MLHGs.

TELEPHONE COMPANY

2.06 Telephone company personnel may add, delete, or change the entries in a customer's speed calling list by using the recent change message RC:SCLIST. Refer to Part 6 A(2) and A(5).

CUSTOMER PREMISES EQUIPMENT

2.07 A customer need have only a plain old telephone set in order to use the Speed Calling feature.

ACTIVATION

A. 1-Digit Speed Calling

2.08 The POTS customer dials the 1-digit speed calling code (2 through 9) corresponding to the number the customer desires to call. Timing (3 to 4 seconds) is performed to determine if the call is a speed call. A DTMF (dual tone multifrequency) calling customer can avoid this timing by dialing the end-of-dialing symbol (#) following the speed calling code.

2.09 The Centrex/ESSX-1 customer dials the 1-digit speed calling code (2 through 7) corresponding to the number the customer desires to call. Timing is performed to determine if the call is a speed call. As with the POTS customer 1-digit speed calling, Centrex/ESSX-1 customers with DTMF service can avoid this timing by dialing the end-of-dialing symbol (#) following the speed calling code.

B. 2-Digit Speed Calling

2.10 For 2-digit speed calling, a customer (POTS or Centrex/ESSX-1) dials the 2-digit speed calling code (20 through 49) corresponding to the number the customer desires to call. Timing is performed to determine if the call is a speed call. A DTMF calling customer can avoid the timing by dialing the end-of-dialing symbol (#) following the speed calling code.

TABLE A DATA REPRESENTED BY SPEED CALLING CODES	
TYPE OF CUSTOMER	
POTS SERVICE	CENTREX SERVICE
7-digit intraoffice 7- or 10-digit interoffice 1+7-digit intraoffice 1+7- or 10-digit interoffice 0+7-digit intraoffice 0+7- or 10-digit interoffice 011+7- to 12-digit International Direct Distance Dialing 01+7- to 12-digit International Direct Distance Dialing	2- to 5-digit extension 9+7-digit intraoffice 9+7- or 10-digit interoffice 9+1+7-digit intraoffice 9+1+7- or 10-digit interoffice 9+0+7-digit intraoffice 9+0+7- or 10-digit interoffice 9+011+7- to 12-digit International Direct Distance Dialing 9+01+7- to 12-digit International Direct Distance Dialing Access code + digits (maximum 12), senderized tie trunk call Access code + extension (directed call pickup) Access code + 7- or 10-digit Wide Area Telecommunications Service Access code + 7- or 10-digit Common Control Switching Arrangement Access code (attendant, automatic ringdown, or ringdown tie trunk call) Access code + 7- or 10-digit (flexible route selection) Access code + 1 + 7- or 10-digit (flexible route selection) Call forwarding variable: 4-digit 7-digit 1+7-digit these may have 10-digit access codes 1+10-digit Call forwarding over private facilities: 7- or 10-digit Common Control Switching Arrangement 7- or 10-digit Wide Area Telecommunications Service 1+7- or 10-digit Wide Area Telecommunications Service 7- or 10-digit foreign exchange 1+7- or 10-digit foreign exchange Variable number with maximum = 12, senderized tie trunk call Any of the preceding 7 with senderized tie line limited to a maximum of 10 or 1 + 10, flexible route selection.

C. Customer Changeable Speed Calling

2.11 Only the owner of a speed calling list is allowed to change entries. A POTS customer dials *74 (or 1174) and *75 (or 1175) to change entries in a 1-digit and 2-digit speed calling list, respectively. For offices that have not yet converted to the standard

dialing plan, the * or 11 is not dialed. It is recommended that 74 and 75 also be used for Centrex/ESSX-1 customers. See reference Part 6 B(12).

2.12 Effective with 1AE8A.15, 1AE9.11, 1AE10.06, and later generic programs, it is possible to inhibit the hard-coded generic program checks for

access codes 72/73 for the Speed Calling feature. If the IHFAC translations item in the office options table is set, the Speed Calling feature can only be accessed via PACT (prefixed access code translator) entries such as *72/*73. The IHFAC item also inhibits the Call Forwarding Variable access codes of 74/75. The IHFAC enhancement is useful in offices which have frequently dialed office codes (NXX) of 72x-75x. Refer to paragraph 3.14.

2.13 To change entries, the customer dials the applicable digits. (See paragraph 2.11.) For group speed calling, if the customer is allowed to change the list, second dial tone is returned. The customer then dials the speed calling code and the desired entry (ie, telephone number) using normal dialing patterns.

FEATURE DESCRIPTION

A. POTS

2.14 When a POTS customer goes off-hook, a LEN (line equipment number) translation (or REN [remote equipment number] if RSS [Remote Switching System] line) is done to determine what features are allowed to the line. When the first digit is collected from a line, the system determines whether the digit is in the range 2 to 9. If the digit is in this range and the line has the 1-digit Speed Calling feature (or has both the 1- and 2-digit Speed Calling features), 3 to 4 seconds of additional digit timing is started. If the line has only the 1-digit Speed Calling feature and a second digit is received, additional digit timing is stopped and normal digit collection is continued. If no second digit is received from this station (time-out) or an end-of-dialing symbol (#) is received, the 1-digit speed calling code is converted to the digits represented by the speed calling code. The call is then processed as though all the digits had been dialed.

2.15 If the line has both 1- and 2-digit Speed Calling features and the first digit is in the range 2 through 4, a possible 2-digit speed calling code is indicated; 3 to 4 seconds of additional digit timing is recycled after the second digit. If a third digit is received at this time, timing is stopped and normal digit collection is continued. If no digit is collected (time-out) or an end-of-dialing symbol (#) is received, the 2-digit speed calling code is converted to the digits represented by the speed calling code. The call is then processed as though all the digits had been dialed.

2.16 If the first digit collected from a POTS line having only the 2-digit Speed Calling feature is a 2 through 4, a second digit is immediately collected. The 3 to 4 seconds of additional digit timing is then started after the second digit to determine if this is a 2-digit speed calling code. If a third digit is received, timing is stopped and normal digit collection is continued. If no third digit is received (time-out) or an end-of-dialing symbol (#) is received, the 2-digit speed calling code is converted to the digits represented by the code and processed normally.

B. Centrex Line

2.17 If the first digit collected from a station having the 1-digit Speed Calling feature is a 2 through 7 and final routing centrex digit interpreter table data is not reached, 3 to 4 seconds of additional digit timing is started. If the station has only the 1-digit Speed Calling feature and a second digit is received, the system stops timing and continues normal digit collection. If no second digit is received from this station (time-out) or an end-of-dialing symbol (#) is received, the 1-digit speed calling code is converted to the digits represented by the speed calling code. The call is then processed as though all the digits had been dialed.

2.18 If the station has both 1- and 2-digit Speed Calling features and a second digit is received, the 3 to 4 seconds of additional digit timing is stopped on the first digit and centrex digit interpreter tables are reentered with the second digit. If final routing data is not reached for the second digit and the first digit is in the range 2 through 4, possible 2-digit speed calling is indicated; and 3 to 4 seconds of additional digit timing is started on the second digit. If a third digit is received, timing is stopped, and normal digit collection is continued. If no third digit is received (time-out) or an end-of-dialing symbol (#) is received, timing is stopped and the 2-digit speed calling code is converted to the digits represented by the code and processed normally.

2.19 If the first digit collected from a station having only the 2-digit Speed Calling feature is a 2 through 4 and final routing centrex digit interpreter table data is not reached, a second digit is immediately collected. The second digit is used to reenter the centrex digit interpreter tables. If final routing data is not reached, possible 2-digit speed calling is indicated; and 3 to 4 seconds of additional digit timing is started on this second digit. If a third digit is received, timing

is stopped, and normal digit collection is continued. If no third digit is received (time-out) or an end-of-dialing symbol (#) is received, timing is stopped and the 2-digit speed calling code is converted to the digits represented by the code and processed normally.

C. Customer Changeable Speed Calling

2.20 When a POTS customer dials a change speed calling list access code (74 for 1-digit lists and 75 for 2-digit lists) and is allowed to change a 1- and/or 2-digit list, 3 to 4 seconds of additional digit timing is started. If a third digit is collected, timing is stopped and normal digit collection is continued. If a time-out occurs or the end-of-dialing digit (#) is received, second dial tone is sent to the customer.

2.21 For Centrex/ESSX-1 customers, the centrex digit interpreter tables are used to indicate that a Centrex/ESSX-1 customer has dialed a change speed calling list access code. The individual station's LEN is checked to insure that the line is allowed to change the speed calling list. If the station is allowed to change the list, second dial tone is sent to the customer.

2.22 For both Centrex/ESSX-1 and POTS customers, the speed calling code is then collected in addition to the new number to be associated with the code. The speed calling code and the number are checked for validity; the RC (recent change) queue is checked for an overflow condition; and the RC system is checked for available resources. If the number is invalid or the RC queue is full, reorder tone is returned to the line. If RC resources are not available, the call receives treatment as defined by fixed route index 162. If the number is valid, the queue is not full and RC resources are available; the speed calling code and new number are entered into the queue; and confirmation tone is given to the customer. Confirmation tone is two bursts of tone: the first, 100 ms in duration, followed by 100 ms of silence and then 300 ms of tone. The new speed calling entry is then available for customer use.

2.23 When the RC system is available to process the next queue entry, the entry is unloaded from the queue and processed by the RC area (primary or temporary RC registers for 1 and 1A ESS switches, respectively).

2.24 The RC queue is accessed by the call program interpreting speed calling entries for subscriber lines. The subscriber's change is made active immediately by searching the queue on each speed calling call.

INTERACTIONS

2.25 Effective with the 1E8/1AE8 generic programs, speed calling interacts with the Carrier Interconnect feature as follows:

- (a) In a speed calling list, a 10XXX carrier access code is not allowed.
- (b) Where a line is presubscribed to a carrier, speed calling calls will route via that carrier if a carrier is required.
- (c) From a POTS line, a user can designate the carrier during call activation by dialing 10XXX prior to dialing the 1- or 2-digit speed calling code.
- (d) For a centrex line, a 10XXX code followed by a speed calling code is not allowed where the customer is served by a 1 ESS switch or a 1A ESS switch equipped with the 1AE8A generic program. Effective with the 1AE9 generic program, the Centrex Abbreviated Dialing 2 feature allows a 10XXX code followed by a speed calling code to be dialed from a centrex line.

OPERATIONAL LIMITATIONS

2.26 A POTS line can have up to eight 1-digit speed calling list entries and up to thirty 2-digit speed calling list entries.

2.27 A Centrex/ESSX-1 line can have up to six 1-digit speed calling list entries and up to thirty 2-digit speed calling list entries.

2.28 One Centrex/ESSX-1 customer is allowed to have a maximum of 128 2-digit group speed calling lists. A Centrex/ESSX-1 customer line is only allowed access to one group list.

2.29 The change speed call list option is denied to any sharer of an individual speed calling list.

RESTRICTION CAPABILITY

2.30 Customer changeable speed calling is automatically restricted when the RC area of call store reaches a critical capacity or when a customer-changeable speed calling entry is abnormally terminated by an interrupt or other recent change internal errors. On a 1 ESS switch, customer changeable speed calling can manually be restricted by using the RC-INH-SCV TTY input message. This message inhibits

additional entries. This restriction can be removed by TTY input message **RC-ALLOW-SCV**. On a 1A ESS switch, customer changeable speed calling can manually be restricted by using the **INH:RCSOURCE SCV!** TTY input message. This message inhibits additional entries. This restriction can be removed by the **ALW:RCSOURCE SCV!** TTY message.

2.31 When the inhibit message is activated, customers dialing the customer change speed calling codes are routed (route index 162) to an announcement or overflow tone.

2.32 All customers of a group speed calling list may be denied the ability to change the list. This is accomplished by indicating all lines are sharers of the list. A pseudo LEN is assigned as the owner of the list to enable telephone company personnel to change the list via the **RC:SCLIST** message.

3. ENGINEERING

3.01 These guidelines are for planning purposes only. The COEES (Central Office Equipment Engineering System) Information System engineering document should be used to manually order and engineer the 1/1A ESS switch. The standard recommended automated procedure is COEES-MO (Mechanized Ordering).

HARDWARE

3.02 Not applicable.

SOFTWARE

A. Base Generic Program

3.03 The Speed Calling feature requires 1610 words of base memory whether or not the feature is used.

B. Optionally Loaded Feature Groups

3.04 Not applicable.

C. Parameters/Call Store Areas

3.05 Parameter word R2QUST contains the call store address of the recent change queue and RCQU (where RCQU is the set card value giving the length of the RC queue). The RC queue is used by customer changeable speed calling entries as a temporary buffer

while the RC system is processing a customer changeable speed calling entry or other RC entries (Fig. 1).

3.06 In the 1A ESS switch with 1AE7 and later generic programs, set card FF001 is required to activate centrex 2-digit individual speed calling.

D. Translations

Note: Bit 23 depicted on translation layouts exists in the 1A ESS switch only.

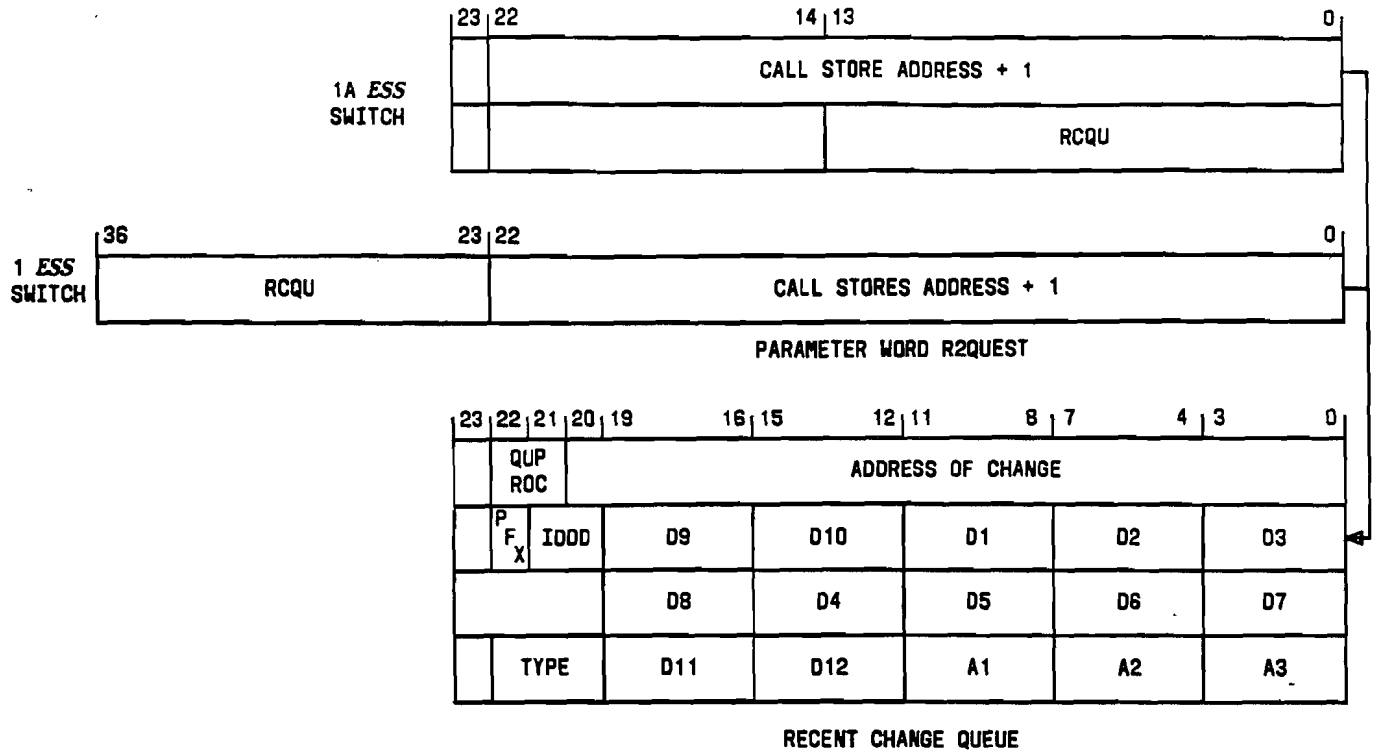
3.07 In the LEN translator, the speed calling feature option indicators are as shown in Fig. 2. If the SHR (share) item is equal to 0 in a 1-digit or 2-digit list address word, the line is designated as an owner of that list and therefore has the ability to change it. If the SHR item is equal to 1, the line is sharing the speed calling list and is not permitted to change the list. For lines having access to group speed calling lists, the SCGC item, when set to 1, indicates that this line can change a group speed calling list.

3.08 Residential lines served by the RSS feature are allowed speed calling. The REN translations are used instead of LEN translations. The speed calling information in the REN translator is the same as contained in the LEN translator [Fig. 2 (a) through (c)].

3.09 With the 1A ESS switch only, a Centrex/ESSX-1 line can have a 2-digit individual speed calling list 30 words in length [Fig. 2 (e) and (f)]. This is indicated by setting item GSC in Word 2 to 255. The address of the individual 2-digit speed calling list appears in the option 2A word (centrex line) or option 5A word (MLHG). A line that has individual 2-digit speed calling cannot have group speed calling.

3.10 In the MLHG common block, the SC item in Word 1 identifies the type of speed calling allowed for the entire group. Word 6 contains the speed calling list address (Fig. 3).

3.11 The DNs (directory numbers) or access codes that are represented by a speed calling code are located in LEN primary translation words or an auxiliary block (Fig. 4). Type 2 is used for the interoffice 7-digit DN. Type 3 points to an auxiliary block that is used for the interoffice 10-digit DN. Type 5 is used for centrex with up to five digit extensions. Type 6 is used for centrex access codes plus one or two digits.



LEGEND:
 A1, A2, A3 - DIALED ACCESS CODES
 D1, ---D12 - DIALED DIGITS
 IDDD - INTERNATIONAL DIRECT DISTANCE DIALING
 PFX - PREFIX (0 OR 1)
 QUPROC - PROCESSED INDICATOR (00 = UNPROCESSED, 01 = PROCESSING STARTED, 10 = PROCESS COMPLETED)
 RCQU - RECENT CHANGE QUEUE
 TYPE - TYPE OF QUEUE ENTRY

Figure 1—Parameter Word R2QUEST and Recent Change Queue

3.12 The centrex digit interpreter table, DTYP (data type) 5, STYP (subtype) 1 and 2 entries have been modified to identify a change speed calling list request from Centrex/ESSX-1 customers (Fig. 5). The STYP item indicates 1-digit speed calling if STYP = 1 and 2-digit speed calling if STYP = 2. The SSTYP (sub-subtype) item may have the following values:

SSTYP	FUNCTION
0	For 1- or 2-digit speed calling.

SSTYP	FUNCTION
1	For changing a 1-digit speed calling list. Valid only when STYP = 1.
2	For changing a 2-digit group speed calling list. Valid only when STYP = 2.

3.13 The centrex digit interpreter table must be built so that no conflict occurs between 1- and 2-digit speed calling codes and other centrex final routing data. For Centrex/ESSX-1 customers, the 1-digit codes

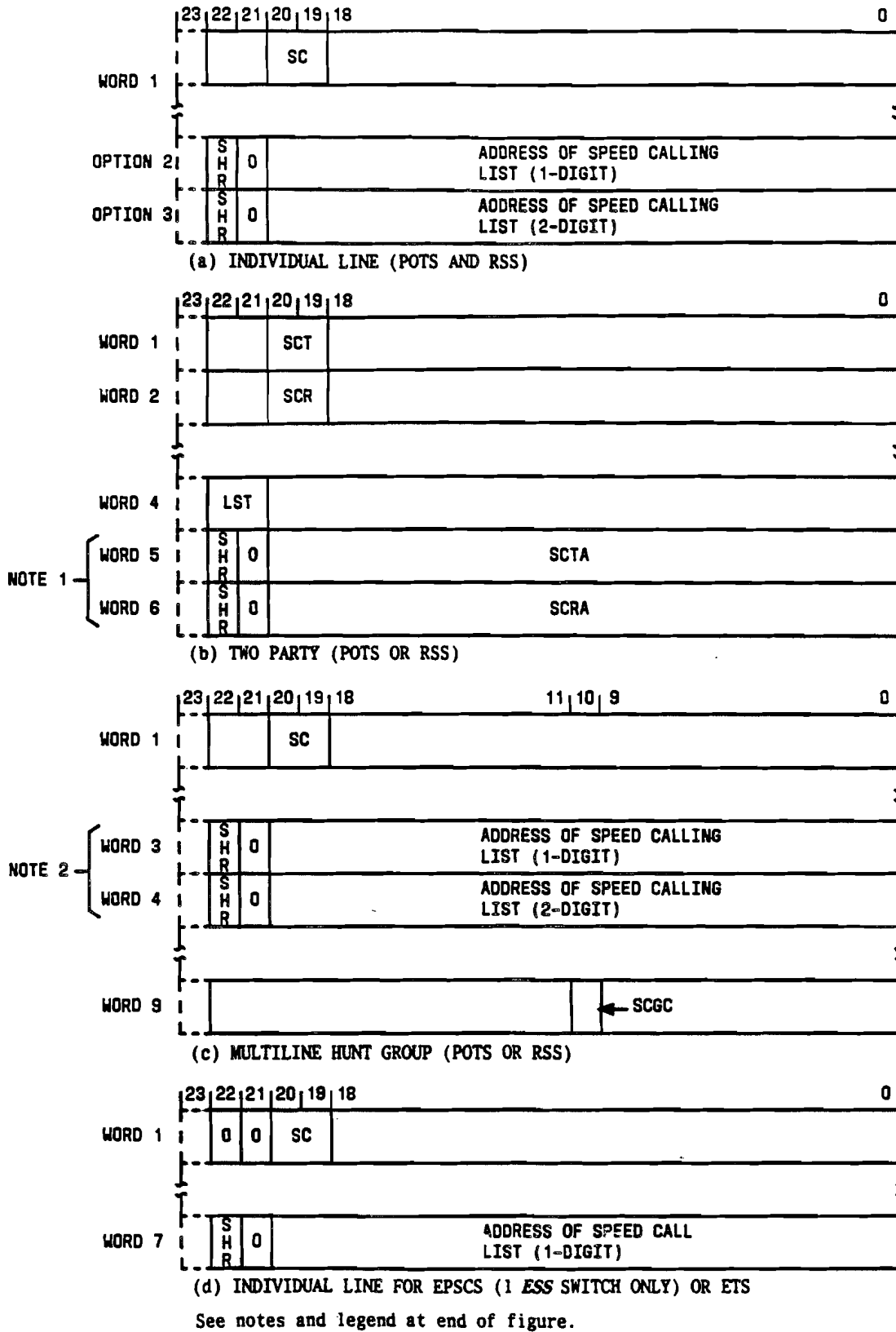
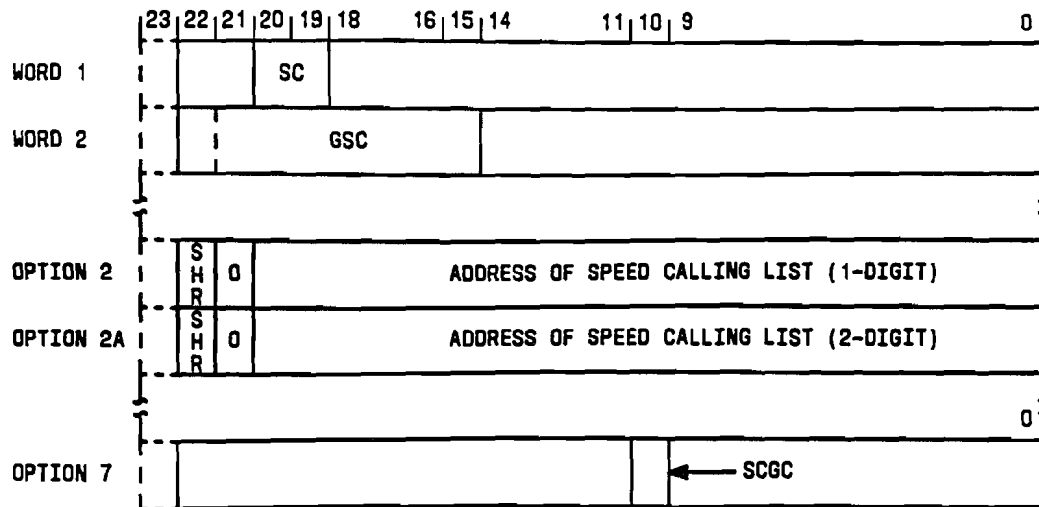
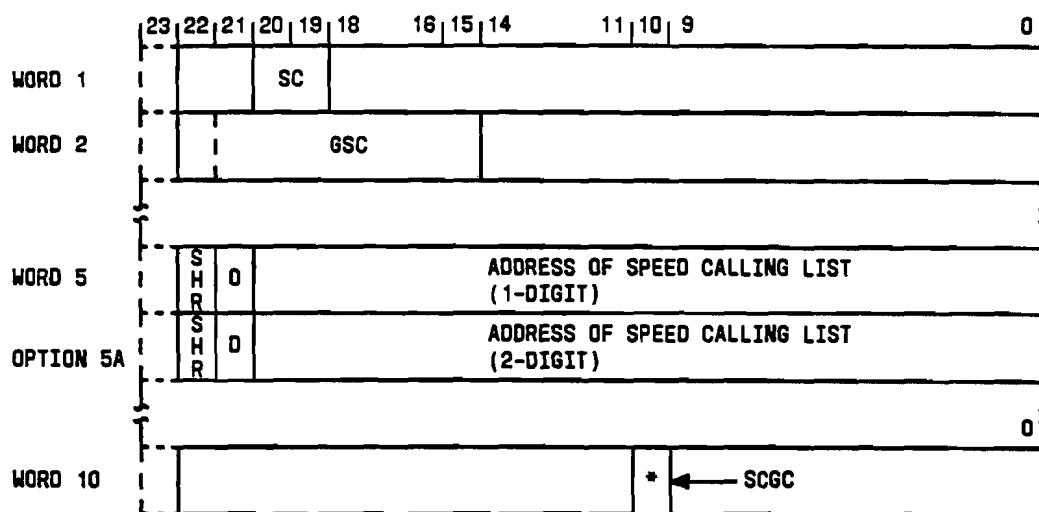


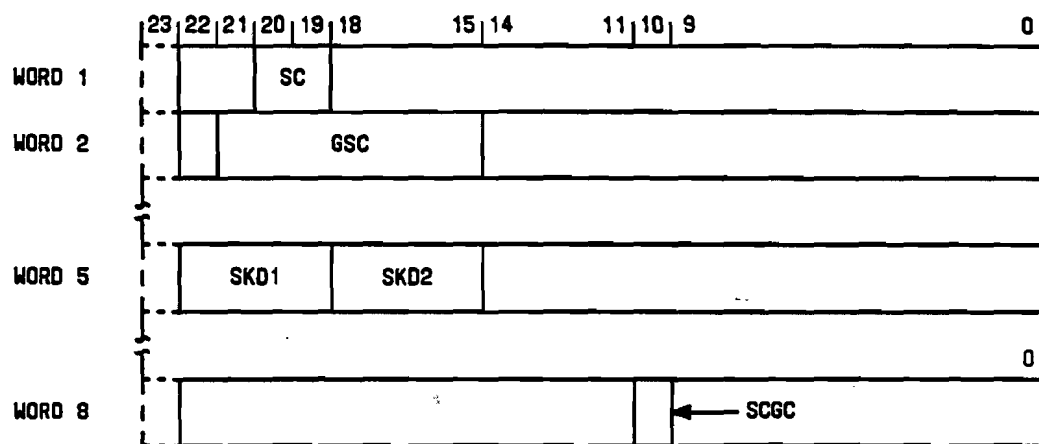
Figure 2—Line Equipment Number and Remote Equipment Number Auxiliary Blocks (Sheet 1 of 3)



(e) CENTREX LINE (NOTE 3)



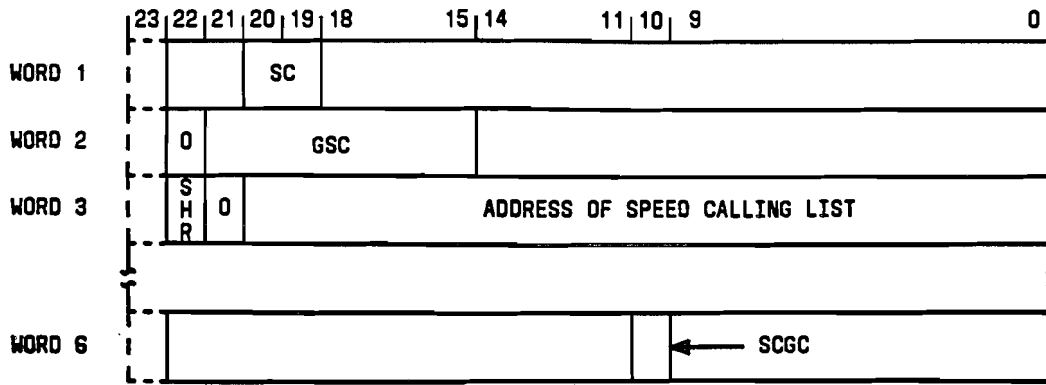
(f) CENTREX MULTILINE HUNT GROUP (NOTE 4)



(g) CENTREX MULTILINE HUNT GROUP FOR ACD-2

See notes and legend at end of figure.

Figure 2—Line Equipment Number and Remote Equipment Number Auxiliary Blocks (Sheet 2 of 3)



(h) SIGNAL PAIR

NOTES:

1. For RSS 2-party lines, these words appear as word 6 and word 7.
2. For RSS multiline hunt groups, these words appear as word 4 and word 5.
3. For centrex lines, option word 2A and bit 22 of the GSC item are applicable to LAE7 and later. (1A ESS switch only). (Also see Note 5).
4. For centrex multiline hunt groups, option word 5A and bit 22 of the GSC item are applicable to LAE7 and later generic programs (1A ESS switch only). (Also see Note 5).
5. The maximum valid value of GSC when indicating a speed calling group number is 127 (128 groups); however, GSC is set to 255 for centrex lines, including those in multiline hunt groups, when the line has an individual 2-digit speed call list.

LEGEND:

- GSC - GROUP SPEED CALLING LIST NUMBER, 00-127 (NOTE 5)
- LST - LIST OCCURRENCE COMBINATION CODE FOR SPEED CALLING
 - * 00 - NEITHER PARTY HAS SPEED CALLING
 - * 01 - ONLY TIP PARTY HAS SPEED CALLING
 - * 10 - ONLY RING PARTY HAS SPEED CALLING
 - * 11 - BOTH PARTIES HAVE SPEED CALLING
- SC - SPEED CALLING
 - * 11 - FOR SPEED CALLING 1 AND 2 DIGITS
 - * 10 - FOR 2-DIGIT SPEED CALLING
 - * 01 - FOR 1-DIGIT SPEED CALLING
 - * 00 - NOT APPLICABLE
- SCGC - SPEED CALLING GROUP CHANGEABLE, 1=ALLOWED
- SCR - SPEED CALLING FOR RING PARTY
 - * 10 - 2-DIGIT SPEED CALLING
 - * 01 - 1-DIGIT SPEED CALLING
 - * 00 - SPEED CALLING DENIED
- SCT - SPEED CALLING FOR TIP PARTY
 - * 10 - 2-DIGIT SPEED CALLING
 - * 01 - 1-DIGIT SPEED CALLING
 - * 00 - SPEED CALLING DENIED
- SCRA - SPEED CALLING LIST ADDRESS FOR RING PARTY
- SCTA - SPEED CALLING LIST ADDRESS FOR TIP PARTY
- SHR - SHAREABLE SPEED CALLING =1, ALLOWED
- SKD1 - BINARY CODED DIGITS USED TO INDEX THE 1-DIGIT SPEED CALLING LIST
- SKD2 - BINARY CODED DIGITS USED TO INDEX THE 2-DIGIT SPEED CALLING LIST

Figure 2—Line Equipment Number and Remote Equipment Number Auxiliary Blocks (Sheet 3 of 3)

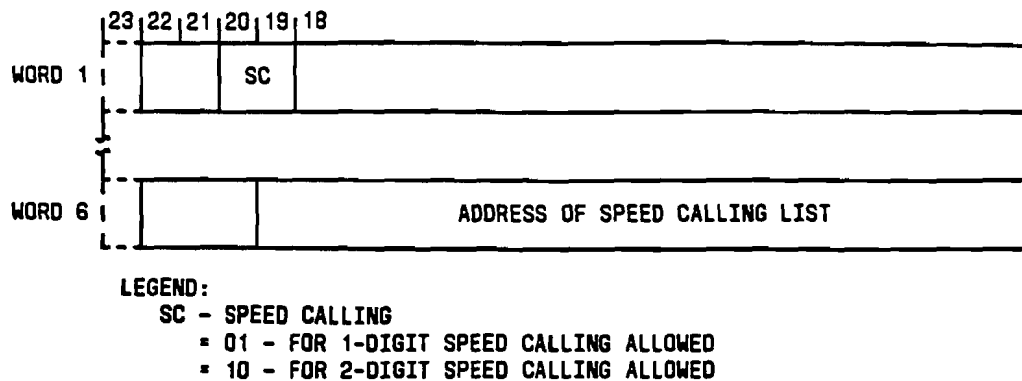


Figure 3—Multiline Hunt Group Common Block

(2 through 7) or the 2-digit codes (20 through 49) can be used only if the corresponding entry in the centrex digit interpreter table is:

- (a) Unassigned (DTYP 0)
- (b) Trunk group found without second dial tone (DTYP 3 with TSDT item equal 0)
- (c) The start of a longer code (address of next lower level table—DTYP 7).

3.14 Word 1, bit 9 of the *office option table* contains item IHFAC which is used to inhibit the hard-coded generic program checks for access codes 72/73 (Fig. 6). Refer to paragraph 2.12.

3.15 Word 2 of the office option table is used to allow or deny the customer-changeable speed calling option for POTS only. Restriction of this option for Centrex/ESSX-1 customers may be obtained by appropriate entries in the centrex digit interpreter table (centrex access treatment code item).

3.16 The *recent change limits translator*, Word 0, requires an entry to limit the quantity of recent change registers to be allowed usage by speed calling customers. Valid entry range is equal to or less than set cards PRCR and TRCR for 1 and 1A ESS switches, respectively (Fig. 7).

REAL TIME

3.17 In a 1A ESS switch, approximately 400 (fast stores) cycles (300 cycles for the 1 ESS switch) are added in terms of real-time cost for a 1-digit or 2-digit speed call. This is in addition to the cycles

required when a digit is dialed and final data is returned immediately. However, an overall real-time savings results due to the decrease in the number of digits dialed.

3.18 When the end-of-dialing digit is used in lieu of digit timing during a speed call, approximately 70 cycles (50 cycles for the 1 ESS switch) are added to the real-time cost.

3.19 Cycle time for the 1A ESS switch is 0.7 microseconds. Cycle times for the 1 ESS switch are 5.5 microseconds (no clock speedup) or 5.0 microseconds (10 percent speedup).

4. IMPLEMENTATION

4.01 The procedure for adding the Speed Calling feature to a POTS, centrex line, or centrex group is illustrated in Fig. 8. See references in Part 6A for detailed information.

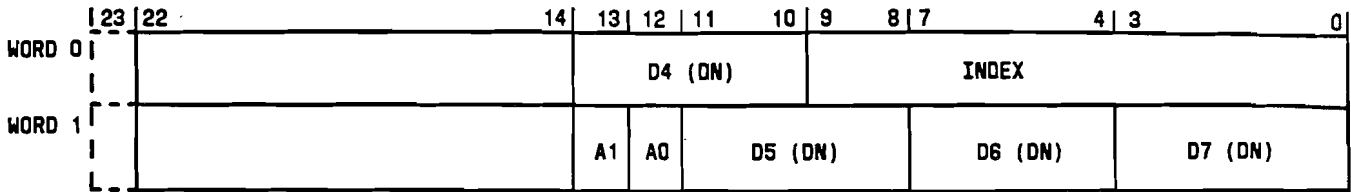
ASSIGNMENT RESTRICTION

4.02 Speed calling cannot be provided for four or eight party lines. Speed calling cannot be provided on a *group basis* for multiline nonhunt groups.

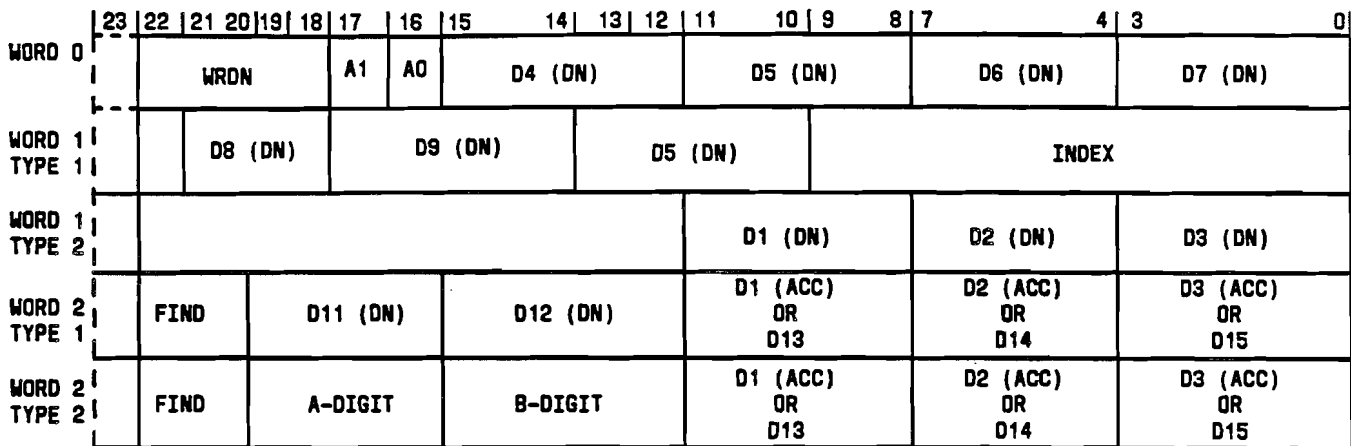
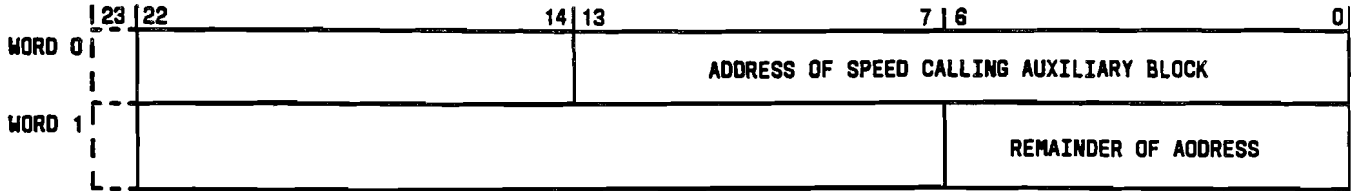
4.03 A Centrex/ESSX-1 line cannot have both 2-digit group and individual speed calling. A centrex group can simultaneously contain lines with 2-digit group speed calling and lines with 2-digit individual speed calling.

SET CARDS

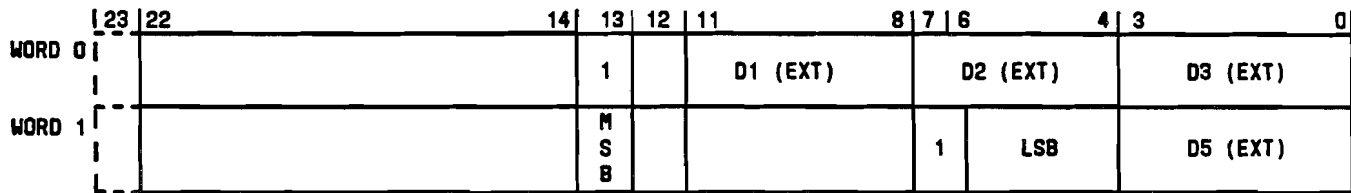
4.04 Set cards 9FCCAD and RCQU are required if the office is arranged for customer changeable speed calling.



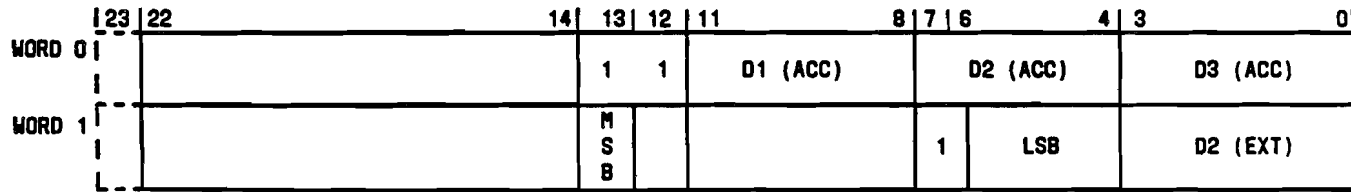
(a) TYPE 2



(b) TYPE 3 AND AUXILIARY BLOCK



(c) TYPE 5



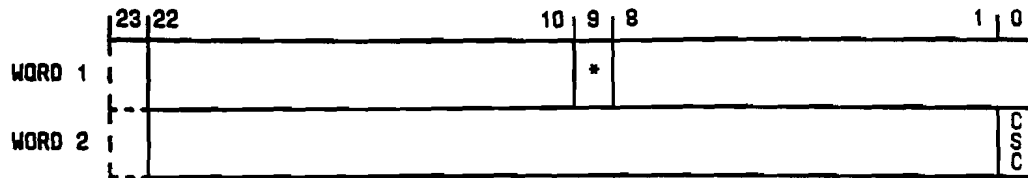
(d) TYPE 6

- LEGEND:**
- ACC - ACCESS CODE
 - A1 - ACCESS CODE ONE
 - A0 - ACCESS CODE ZERO
 - D1-15 - DIGITS OF THE ACCESS CODE
 - DN - DIRECTORY NUMBER
 - EXT - EXTENSION
 - FIND - FEATURE INDICATOR
 - LSB - LEAST SIGNIFICANT BITS OF EXT
 - MSB - MOST SIGNIFICANT BITS OF EXT
 - WRDN - NUMBER OF WORDS

Figure 4—LEN Primary Translation Words and Auxiliary Blocks



Figure 5—Centrex Digit Interpreter Table Data Type 5 Word



LEGEND:
 CSC - CUSTOMER CHANGEABLE SPEED CALLING, ALLOW=0, DENY=1
 IHFAC - INHIBIT HARD CODED FEATURE ACCESS CHECKS

Figure 6—Office Option Table

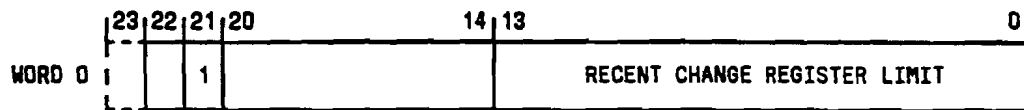


Figure 7—Recent Change Limits Translator

4.05 Set card FF001 is required for centrex 2-digit individual speed calling (1A ESS switch, 1AE7 and later generic programs).

4.06 Refer to the parameter documents in Part 6 B(6) through B(9) for set card engineering.

TRANSLATION FORMS

4.07 The following translation forms (refer to the TG-1A for details) are applicable to the Speed Calling feature.

- ESS 1101—Directory Number Record
- ESS 1107—Supplementary Information Record
- ESS 1109—Centrex Group Record
- ESS 1115—Multiline Group Record.
- ESS 1500D—Office Option Record.

RECENT CHANGE MESSAGES

4.08 The following RC (recent change) or TTY input messages are applicable to the Speed Calling feature. Refer to Part 6 A(1), A(2), A(5), or A(6) for details.

MESSAGES

FUNCTION

- | | |
|----------------------|--|
| ALW:RCSOURCE
SCV! | This TTY message is used to deactivate the restriction that prohibits customer changeable speed calling (1A ESS switch). |
| INH:RCSOURCE
SCV! | This TTY message is used to activate the restriction that prohibits customer changeable speed calling (1A ESS switch). |
| RC-INH-SCV | This TTY message is used to inhibit all customer changeable speed calling (1 ESS switch). |

MESSAGES	FUNCTION
RC-ALLOW-SCV	This TTY message is used to remove the inhibition of the RC:INH message (1 ESS switch).
RC:SCLIST	This RC message builds data type 05 entries for 1- and 2-digit speed calling for Centrex/ESSX-1 customers.
RC:LINE	This RC message provides the Speed Calling feature to Centrex/ESSX-1 and POTS customers using keywords ESL (1-digit speed calling), ESF (2-digit speed calling), SH1 (share 1-digit list), SH2 (share 2-digit list), and SCG (group Centrex/ESSX-1 speed calling customer only). Customer changeable speed calling is provided to business lines by keyword CSL.
RC:MLHG	This RC message provides the Speed Calling feature to all lines in a MLHG using keywords ESL (1-digit) and ESF (2-digit).
RC:SCLIST	This RC message adds, replaces, or deletes codes in a speed calling list.
RC:TWOPTY	This RC message provides the Speed Calling feature for two-party lines using keywords ESL (1-digit) and ESF (2-digit). Also assigns 1-digit speed calling list using keyword SH1 or 2-digit speed calling list using keyword SH2.

VERIFICATION

4.09 The following TTY messages, found in Part 6 B(1) through B(4), can be used to verify speed calling assignments.

- (a) The VFY-DN input message verifies features associated with one or a group of DNs. System response should be a TR01 output message.

- (b) The VFY-LEN input message verifies features associated with a line. System response should be a TR03 output message.

- (c) The VFY-LIST input message verifies speed calling list entries. System response should be a TR07 output message.

- (d) The VFY-XDGNT input message verifies centrex digit interpreter table entries. System response should be a TR18 output message.

4.10 Test calls can be made by individual speed calling list owners and sharers and by group speed calling list stations to verify that the Speed Calling and the Customer Changeable Speed Calling features are properly assigned and are functioning correctly.

5. ADMINISTRATION

MEASUREMENTS

5.01 Traffic measurements are provided by TMC (type measurement code) 52 for customer-changeable speed calling attempts for both POTS and large Centrex/ESSX-1 customers with the Speed Calling feature. The count is available on H and C schedules.

AUTOMATIC MESSAGE ACCOUNTING

5.02 Customers are charged for speed calls made outside of their local district using the same rate as charged for standard long distance calls. If the customer also subscribes to the Outward Wide Area Telecommunications Service, billing is determined in accordance with telephone company standards.

5.03 No charges are made for subscriber changes to speed calling lists using the customer-changeable speed calling list option.

6. SUPPLEMENTARY INFORMATION

REFERENCES

6.01 The following documentation contains information related to or affected by the Speed Calling feature.

A. AT&T Practices

- (1) 231-048-309—CTXCB, CTXDI, CTXEXR, CXDICH, DITABS, DLG, FLXDG, FLXRD, and FLXRS Centrex-CO/ESSX-1 Recent Change Formats (1E6/1AE6 Through 1E8/1AE8 Generic Programs)
- (2) 231-048-312—ACT, CFV, DNRNGE, LINE, MLHG, MOVE, MPTY OBS, SCLIST, SIMFAC, TNESN, TWOPTY, VSS Line Recent Change Formats (1E6/1AE6 Through 1E8B.05/1AE8A.04 Generic Programs)
- (3) 231-060-210—Service Circuits—Network Engineering
- (4) 231-090-120—Carrier Interconnect Feature
- (5) 231-318-325—ACT, CFV, DNRNGE, LINE, MLHG, MOVE, SCLIST, SLE, TWOPTY, and VEND—Line Recent Change Formats (1AE8A.05 and Later Generic Programs)
- (6) 231-318-355—CTXCB, CTXDI, CTXEXR, CXDICH, DITABS, Centrex-CO/ESSX-1—Recent Change Formats (Generic Programs 1AE8A.05 and Later).

B. Other Documentation

- (1) Input Message Manual IM-1A001

- (2) Output Message Manual OM-1A001
- (3) Input Message Manual IM-6A001
- (4) Output Message Manual OM-6A001
- (5) Translation Guide TG-1A
- (6) Office Parameter Specification PA-591001
- (7) Office Parameter Specification PA-6A001
- (8) Parameter Guide PG-1—1 ESS Switch
- (9) Parameter Guide PG-1A—1A ESS Switch
- (10) Translation Output Configuration PA-591003
- (11) Translation Output Configuration PA-6A002
- (12) System Letter—SR 78-04-446 Nationwide Numbering Plan and Dialing Procedures—Standard Numbering and Dialing Plan for Central Office Vertical Services.

7. COMMENT FORM

7.01 A comment form is located at the back of this practice to provide a communications channel from the user to the writer.

8. ISSUING ORGANIZATION

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