

FEATURE DOCUMENT
HOSPITAL SERVICE FEATURES
2-WIRE NO. 1 AND 1A ELECTRONIC SWITCHING SYSTEMS

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NOTICE

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FEATURE DEFINITION AND DESCRIPTION**1. DEFINITION/INTRODUCTION****DEFINITION**

1.01 The hospital service features are a family of features available with the ESS that are frequently requested by hospital business customers.

INTRODUCTION

1.02 This feature document provides a general description of the hospital service features. References are made to other documents for more detailed information. Table A is a guide to documents containing detailed information on hospital service features.

1.03 Features offered as part of the hospital service features are as follows:

- Single digit dialing
- Direct outward dialing
- Direct inward dialing
- Code calling
- Attendant position
- TOUCH-TONE® calling.

2. USER PERSPECTIVE**CUSTOMER**

2.01 *Split Service*—This feature allows administrative lines to have different group features than patient lines. For instance, call transfer individual might be given to administrative lines and call transfer attendant to patient lines.

2.02 *Controlled Termination Restriction*—This feature permits the attendant and/or certain administrative lines to prevent, on an individual or group basis, selected station lines from receiving any direct dialed calls. These same lines may receive calls from or through the attendant. When activated, the restricted calls are routed (depending on option selected) to a recorded intercept announcement, an intercept tone, or an attendant. Refer to FD 231-090-351 for detailed information.

2.03 *Controlled Outward Restriction*—This feature permits the attendant and/or certain administrative lines to control the restriction of direct dialed outgoing local central office and toll calls from selected station lines. When activated, restricted calls are routed to reorder. Refer to FD 231-090-351 for detailed information.

2.04 *Controlled Station-to-Station Restriction*—This feature, also referred to as intra-Centrex inward restriction, permits the attendant and/or certain administrative lines to prevent selected station lines from receiving station-to-station calls. When activated, the restricted calls are routed to recorded intercept announcement. Refer to FD 231-090-351 for detailed information.

2.05 *Controlled Total Restriction*—This feature permits the attendant and/or certain administrative lines to prevent, on an individual or group basis, selected station lines from originating

TABLE A

HOSPITAL SERVICE FEATURE DOCUMENT REFERENCES

FD NUMBER	FD TITLE	CONTENTS
231-090-351	Controlled Line Status Feature	Controlled termination restriction Controlled outward restriction Controlled station-to-station restriction Controlled total restriction Attendant emergency override
231-090-300	Slumber Service (and Make-Busy Applications) Feature	Slumber service
231-190-321	Centrex-CO Toll Diversion (TOLD) Feature	Toll diversion to attendant
231-090-402	Station Message Register Service Feature	Station message register
231-090-073	Call Forwarding Features	Call forwarding variable Call forwarding busy line Call forwarding don't answer
231-090-200	Radio Paging Access Feature Using Voice Connecting Arrangement DCW	Radio paging
231-090-199	Loudspeaker Paging Feature	Loudspeaker paging
231-090-116	Conference Calling Feature	Conference calling
231-090-180	Multiline Groups—Hunting and Non-hunting	Station hunting
231-090-217	Recorded Telephone Dictation Feature Using Voice Connecting Arrangement DCT	Recorded telephone dictation
231-090-403	Directed Call Pickup With Barge-in	Directed call pickup with barge-in
231-090-400	Single Digit Dialing Feature	Single digit dialing
231-090-090	Centrex-CO Direct Inward Dialing Feature	Direct inward dialing
231-090-092	Code Calling Feature	Code calling
231-090-178	50A CPS Attendant Position Feature	Simplified attendant position
231-090-060	51A Customer Premise System Attendant Position — Universal Cordless Telephone Console With Data Link and Switched Loop Features	Data link attendant position

or receiving any calls. Optionally, these lines can originate calls to and receive calls through the attendant. When activated, the restricted calls are routed (depending upon option selected) either to a recorded intercept announcement, to an intercept tone, or to an attendant. Refer to FD 231-090-351 for detailed information.

2.06 Attendant Emergency Override—This feature allows an attendant to dial an administrative control access code plus the extension number to override the termination restriction imposed upon a station. Refer to FD 231-090-351 for detailed information.

2.07 Slumber Service—This feature is a line arrangement through which an individual customer station or a functional group of individual stations can be temporarily prohibited from receiving calls. Slumber service is also referred to as do not disturb service, flexible incoming call restriction, and controlled termination restriction. Refer to FD 231-090-300 for detailed information.

2.08 Toll Diversion—This feature causes station-originated restricted toll calls of a business customer using central office service to be intercepted and routed to the attendant. A toll diversion to attendant restricted toll call is any station-originated toll call, such as direct distance dialing, message rate service, and code restricted (denied) calls. Refer to FD 231-190-321 for detailed information.

2.09 Station Message Register—This feature permits message register data to be stored in the call store of an ESS office. Upon request from an inquiry and display station at the hospital, the message units used by a particular patient line are displayed on a numeric light emitting diode display and, optionally, on a printer. If the hospital has the optional printer, the message units used by each of a contiguous group of patient extension numbers may be printed out. Refer to FD 231-090-402 for detailed information.

2.10 Call Forwarding Don't Answer—This feature permits forwarding of calls that are not answered after a predetermined number of ringing cycles, either to a preselected station within the business customer group or to an attendant. The number of ringing cycles that occur before an unanswered call is forwarded may be selected by the customer. Calls that originate within, as well

as outside, the business customer group may be forwarded. Refer to Section 231-090-073 for detailed information.

2.11 Radio Paging—This feature allows attendant, tie trunk, and station users dial-access to customer-provided radio paging equipment to selectively tone alert or voice page individuals carrying pocket radio receivers (or other devices). Refer to Section 231-090-200 for detailed information.

2.12 Loudspeaker Paging—This feature allows business customer group attendants, station users, and nonbusiness customer station users to dial-access loudspeaker paging equipment. Capabilities are provided to allow multizone paging by providing a separate access code or directory number for each zone within the customer's location. Refer to Section 231-090-199 for detailed information.

2.13 Conference Calling—This feature allows a business customer service station to establish conference connections involving up to six conferees (including the conference controller) without the aid of the attendant. Refer to Section 231-090-116 for detailed information.

2.14 Station Hunting—This feature enables a call to be routed to an idle station in a prearranged group when the called station line is busy. Refer to Section 231-090-180 (when published) for detailed information.

2.15 Recorded Telephone Dictation—This feature permits access to and control of customer-owned telephone dictating equipment by stations, tie trunks, and business customer service attendants within the business customer service system. Station access may be via TOUCH-TONE or rotary dial. Attendant and tie trunk access must be via TOUCH-TONE. Refer to Section 231-090-217 for detailed information.

2.16 Directed Call Pickup With Barge-in—This feature provides the ability for a call directed to a station line to be answered by any other station user within the same business customer service group or complex by dialing a unique answer code and the extension number of the line to be answered. If the call has already been answered, a burst of tone is applied to alert the answering party of the impending presence of a third party. The third party is then bridged

into the existing talking connection. Refer to Section 231-090-403 for detailed information.

2.17 Single Digit Dialing—This feature allows business customer station users to reach selected lines or other internal facilities (e.g., the laboratory) by dialing a single digit code. Refer to FD 231-090-400 for detailed information.

2.18 Direct Outward Dialing—This feature enables a business customer service station user to gain access to the exchange network, without the assistance of an attendant, by dialing an access code and receiving a second dial tone. The user may then proceed to dial the desired exchange network number. This feature is part of the basic business customer service package.

2.19 Direct Inward Dialing—This feature allows an incoming call from the message network to reach a specific business customer station line (or group of lines if in a hunt group) within a business customer service group without attendant assistance. Refer to Section 231-090-090 for detailed information.

2.20 Code Calling—This feature allows business customer attendants as well as tie trunk and local station users to dial an access code and a 2- or 3-digit called-party code to activate signaling devices (bells, gongs, horns, etc.) with a coded signal corresponding to the called code. The called party, upon recognizing this signal, can then be connected to the calling party by dialing an answering code from any station within the business customer group. Refer to Section 231-090-092 for detailed information.

2.21 Attendant Position—The 50A Customer Premises System (CPS) and the 51A CPS are offered by ESS offices. Refer to Sections 231-090-060 and 231-090-178 for detailed information.

2.22 TOUCH-TONE Calling—These telephones are available as a standard ESS offering.

3. SYSTEM PERSPECTIVE

SOFTWARE DATA STRUCTURES

3.01 For all hospital service features except split service, direct outward dialing, and TOUCH-TONE calling, refer to individual feature

documents, as outlined in Table A, for detailed information on software data structures.

TRANSLATIONS

3.02 A Centrex group must be built in order to have hospital service features (except TOUCH-TONE calling). Procedures for adding or removing a Centrex group are covered in Section 231-118-333.

3.03 In order to have the split service feature for Centrex common block features (e.g., call transfer individual, call transfer attendant, and attendant camp-on), a Centrex complex must be built consisting of two Centrex groups linked by a master Centrex number (MXCN).

3.04 Translations for providing Centrex service include:

- Centrex common block and Centrex digit interpreter tables (customer group data)
- Centrex digit interpreter tables (customer group dialing pattern)
- Trunk translations (trunk network number and trunk class code data)
- Line translations (line equipment number and line class code data)
- Directory number translations (directory number data)
- Office translations (3-digit and number group number).

FEATURE OPERATION

3.05 Refer to individual feature documents, as outlined in Table A, for detailed information on the operation of the various hospital service features, except for direct outward dialing, split service, and TOUCH-TONE calling.

FEATURE ATTRIBUTES

4. APPLICABILITY

4.01 The hospital service features are provided on a business customer service basis.

5. LIMITATIONS AND RESTRICTIONS

5.01 Refer to individual feature documents, as outlined in Table A, for detailed information on specific limitations and restrictions.

6. COMPATIBILITY AND INTERACTIONS

6.01 Refer to individual feature documents, as outlined in Table A, for detailed information on compatibility and interactions.

7. COST FACTORS

7.01 For all hospital service features except split service, direct outward dialing, and TOUCH-TONE calling, refer to individual feature documents, as outlined in Table A, for detailed information on cost factors.

MEMORY—NO. 1 ESS**A. Fixed**

7.02 Not applicable.

B. Conditional

7.03 Not applicable.

C. Variable

7.04 The following additional memory is required when the split service feature for Centrex common block features is supplied on a per-customer-group basis:

- Translation (program store): One 31-word Centrex common block and one or more levels of digit interpreter tables.

MEMORY—NO. 1A ESS**A. Fixed**

7.05 Not applicable.

B. Conditional

7.06 Not applicable.

C. Variable

7.07 The following additional memory is required when the split service feature for Centrex common block features is supplied on a per-customer-group basis:

- Translation (unduplicated call store, file store): One 31-word Centrex common block and one or more levels of digit interpreter tables.

PROCESSOR TIME

7.08 There is no additional processor time caused by the split service feature.

HARDWARE

7.09 There is no additional hardware required for the split service feature.

8. AVAILABILITY

8.01 Table B lists the availability of the hospital service features.

CONSIDERATIONS FOR INCORPORATION OF FEATURE INTO SYSTEM**9. PLANNING**

9.01 Refer to individual feature documents, as outlined in Table A, for detailed information on planning.

10. HARDWARE

10.01 Refer to individual feature documents, as outlined in Table A, for detailed information on hardware.

11. DETERMINATION OF QUANTITIES

11.01 For all hospital service features except split service, direct outward dialing, and TOUCH-TONE calling, refer to individual feature documents, as outlined in Table A, for detailed information on determination of quantities.

HARDWARE

11.02 There is no additional hardware required for the split service feature.

TABLE B

AVAILABILITY OF HOSPITAL SERVICE FEATURES

FEATURE	AVAILABILITY
Split service	All active generic programs
Controlled termination restriction Controlled outward restriction Controlled station-to-station restriction Controlled total restriction Attendant emergency override	SP/CC-CTX-8, Issue 2 (No. 1 ESS); 1AE4 (No. 1A ESS) and later generic programs
Slumber service	CTX-7 and later, No. 1 ESS; all generic programs, No. 1A ESS
Toll Diversion	CTX-7 and later, No. 1 ESS; all generic programs, No. 1A ESS
Station message register	CTX-7 and later, No. 1 ESS; all generic programs, No. 1A ESS
Call forwarding don't answer	SP-CTX-5 and CC-CTX-6 and later for No. 1 ESS; all generic programs for No. 1A ESS
Radio paging	All active generic programs
Loudspeaker paging	All active generic programs
Conference calling	CTX-6, Issue 1 and later for No. 1 ESS; all generic programs for No. 1A ESS
Station hunting	All active generic programs
Recorded telephone dictation	All active generic programs
Directed call pickup with barge-in	CTX-7, Issue 1 and later, No. 1 ESS; all generic programs, No. 1A ESS
Single digit dialing	CTX-7, Issue 1 and later, No. 1 ESS; all generic programs, No. 1A ESS
Direct outward dialing	All active generic programs
Direct inward dialing	All active generic programs
Code calling	All active generic programs
Attendant position	51A CPS — all active generic programs 50A CPS — CTX-5, Issue 6 and later (No. 1 ESS); all generic programs, No. 1A ESS
TOUCH-TONE calling	All active generic programs

MEMORY

11.03 The split service feature for Centrex common block features requires one additional 31-word Centrex common block and one or more 15-word digit interpreter tables. Digit interpreter auxiliary blocks may be required if attendant control of facilities, individual billing directory number, simulated facilities, or certain other features are required. These auxiliary blocks can be either two or three words long. Refer to PA-591003 (No. 1 ESS) or TDA 6A-002 (No. 1A ESS) translations output configuration for details.

12. ASSIGNMENTS AND RECORDS**INPUT AND RECORD KEEPING**

12.01 For all hospital service features except split service, direct outward dialing, and TOUCH-TONE calling, refer to individual feature documents, as outlined in Table A, for detailed information on translation forms and recent change messages.

A. Translation Forms

12.02 The ESS translation forms, found in TG-1A, used for the split service feature (Centrex common block features only) are as follows:

- (a) ESS 1101—Directory Number Record: This form associates a Centrex line with the Centrex group number.
- (b) ESS 1109—Centrex Group Record: This form contains the Centrex class information plus screening and routing data for a Centrex group.
- (c) ESS 1110—Centrex Group Number Record: This form associates the Centrex group number with the master Centrex number.

B. Recent Change Messages

12.03 Not applicable to the split service feature.

UNIFORM SERVICE ORDER CODES

12.04 Table C lists the Uniform Service Order Codes (USOCs) for the hospital service features.

13. NEW INSTALLATION AND GROWTH

13.01 Refer to individual feature documents, as outlined in Table A, for detailed information on new installation and growth on all features except split service, direct outward dialing, and TOUCH-TONE calling.

13.02 Figure 1 illustrates the procedures for assigning the split service feature.

14. TESTING

14.01 For all hospital service features except split service, direct outward dialing, and TOUCH-TONE calling, refer to individual feature documents, as outlined in Table A, for detailed information on testing.

14.02 TTY input and output messages, found in IM-1A001 and OM-1A001 (No. 1 ESS) or in IM-6A001 and OM-6A001 (No. 1A ESS), can be used to verify translations for the split service feature (Centrex common block features only). The procedure is:

- (a) Use VFY-CSTG-35 input message to verify the Centrex common block assignment. System responds with the TR17 output message.
- (b) Use VFY-XDGNT input message to verify the Centrex digit interpreter tables. System responds with the TR18 output message.
- (c) Use VFY-LEN input message to verify the line equipment number translations. System responds with the TR03 output message.
- (d) Use the VFY-DN input message to verify the directory number translations. System responds with the TR01 or TR08 output message.

15. MEASUREMENTS

15.01 For all hospital service features except split service, direct outward dialing, and TOUCH-TONE calling, refer to individual feature documents, as outlined in Table A, for detailed information on traffic measurements. Measurements are not made for the split service, direct outward dialing, and TOUCH-TONE calling features.

TABLE C

USOCs FOR HOSPITAL SERVICE FEATURES

FEATURE	USOC
Split service	None
Controlled termination restriction Controlled outward restriction Controlled station-to-station restriction Controlled total restriction Attendant emergency override	Not available at this time
Slumber service	Not available at this time
Toll diversion	None
Station message register	Not available at this time
Call forwarding don't answer	E9G
Radio paging	1 PR and 2 PR
Loudspeaker paging	FR8
Conference calling	None
Station hunting	None
Recorded telephone dictation	DCT
Directed call pickup with barge-in	IIDMA
Single digit dialing	EES
Direct outward dialing	None
Direct inward dialing	ND8, ND9, and NDA
Code calling	CCJ
Attendant position	For 50A CPS — ATT For 51A CPS — See Section 231-090-060

16. CHARGING

16.01 No charging is done for the split service, direct outward dialing, and TOUCH-TONE calling features. For detailed information on charging for all other hospital service features, refer to individual feature documents as outlined in Table A.

SUPPLEMENTARY INFORMATION**17. GLOSSARY**

17.01 Not applicable.

18. REASONS FOR REISSUE

18.01 Not applicable.

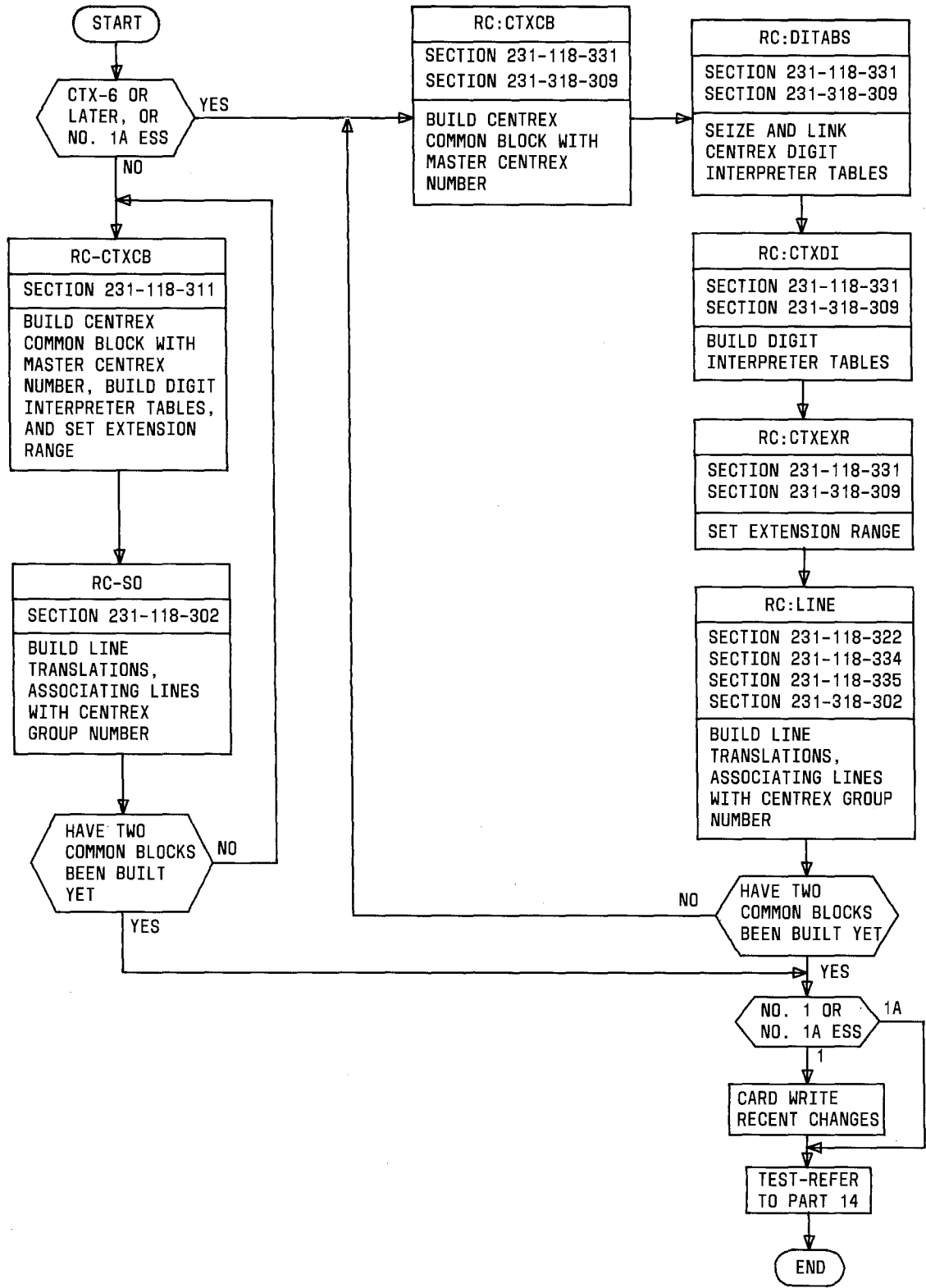


Fig. 1—Procedure for Assigning the Split Service Feature

19. REFERENCES

19.01 See Table A for feature document references.

A. Bell System Practices

- (1) Section 231-118-311—Centrex Co—Recent Change Procedures (CTX-5 and Earlier Generic Programs)—2-Wire No. 1 Electronic Switching System
- (2) Section 231-118-302—Recent Change Service Order Formats and Procedures (Non-Centrex and Centrex) (CTX-5 and Earlier Generic Programs)—2-Wire No. 1 Electronic Switching System
- (3) Section 231-118-322—Line Recent Change Procedures (Non-Centrex and Centrex) (CTX-6, Issues 2 and 3, Generic Programs)—2-Wire No. 1 Electronic Switching System
- (4) Section 231-118-331—Centrex CO RC Procedures for CTXCB, CTXDI, CTXEXR, CXDICH, DITABS, DLG, FLXDG, FLXRD, and FLXRS (CTX-6 Through 1E5 Generic Programs)—2-Wire No. 1 Electronic Switching System
- (5) Section 231-118-334—Line Recent Change Procedures (Non-Centrex and Centrex)—CTX

6, Issue 7, Generic Program—2-Wire No. 1 Electronic Switching System

(6) Section 231-118-335—Line RC Procedures for LINE, TWOPTY, MPTY, SCLIST, MLHG, ACT, and CFV (CTX-7 Through 1E5 Generic Program)

(7) Section 231-318-302—Line RC Procedures for LINE, TWOPTY, MPTY, SCLIST, MLHG, and CFV (Through 1AE4 Generic Program)—2-wire No. 1A Electronic Switching System

(8) Section 231-318-309—Centrex-CO RC Procedures for CTXCB, CTXDI, CTXEXR, CXDICH, DITABS, DLG, FLXDG, FLXRD, and FLXRS (Through 1AE4 Generic Program)—2-Wire No. 1A Electronic Switching System.

B. Other Documentation

- (1) Translation Guide TG-1A
- (2) Translation Output Configurations PA-591003 (No. 1 ESS) and PA-6A002 (No. 1A ESS)
- (3) Input Message Manual IM-1A001 (No. 1 ESS) and IM-6A001 (No. 1A ESS)
- (4) Output Message Manual OM-1A001 (No. 1 ESS) and OM-6A001 (No. 1A ESS).