**SEMI-AUTOMATIC TAPE RELAY SYSTEM**

**BELLFAST**

**OUTLYING STATION**

**SEQUENCE CHARTS**

**BASED ON WA 12773-SD, ISSUE 8**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>CHART NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLAN I &amp; II (SINGLE)</td>
<td></td>
</tr>
<tr>
<td>SPL PLANS 20, 22, 46, 47</td>
<td></td>
</tr>
<tr>
<td>CONNECT STATION</td>
<td>1</td>
</tr>
<tr>
<td>AUTOMATIC STATION SENDING</td>
<td>3</td>
</tr>
<tr>
<td>STATION OFF FEATURE</td>
<td>6</td>
</tr>
<tr>
<td>BREAK FEATURE</td>
<td>7</td>
</tr>
<tr>
<td>TAUT TAPE STP ALARM</td>
<td>10</td>
</tr>
<tr>
<td>KEYBOARD FEATURE</td>
<td>AA</td>
</tr>
<tr>
<td>PRIORITY START FEATURE</td>
<td>BB</td>
</tr>
<tr>
<td>TYPE 1 AUXILIARY SEND</td>
<td>FF</td>
</tr>
<tr>
<td>TYPE 2 AUXILIARY SEND</td>
<td>FF</td>
</tr>
<tr>
<td>REMOTE RESTORATION OF STP ALARM</td>
<td>HH</td>
</tr>
<tr>
<td>REMOTE RESTORATION OF STA-OFF</td>
<td>II</td>
</tr>
<tr>
<td>AUTOMATIC TAPE FEED OUT</td>
<td>DD</td>
</tr>
<tr>
<td>MANUAL TAPE FEED OUT</td>
<td>EE</td>
</tr>
<tr>
<td>SUB PLANS</td>
<td>25</td>
</tr>
</tbody>
</table>

<p>| PLAN 12-13-14 &amp; 42-43-44 (DUPLEX) |           |
| SPL PLANS 19, 21, 45, 47         |           |
| CONNECT STATION                  | 2         |
| AUTOMATIC STATION SENDING        | 4         |
| CODE RECD. (STATION SENDING)     | 5         |
| STATION OFF FEATURE             | 6         |
| BREAK FEATURE                   | 8         |
| EMERGENCY STOP FEATURE          | 9         |
| TAUT TAPE STP ALARM             | 11        |
| KEYBOARD FEATURE                | AA        |
| KEYBOARD FEATURE                | AA        |
| PRIORITY START FEATURE           | BB        |
| AUXILIARY SEND FEATURE          | FF        |
| AUXILIARY SEND FEATURE          | FF        |
| REMOTE RESTORATION OF STP ALARM | HH        |
| REMOTE RESTORATION OF STA-OFF   | II        |
| AUTOMATIC TAPE FEED OUT          | DD        |
| MANUAL TAPE FEED OUT             | EE        |
| SUB PLANS                        | 25        |</p>
<table>
<thead>
<tr>
<th>Special Plans 16 &amp; 17 (Single)</th>
<th>Chart No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect Station</td>
<td>26 (Plan 16)</td>
</tr>
<tr>
<td>Connect Station</td>
<td>28 (Plan 17)</td>
</tr>
<tr>
<td>Automatic Station Sending</td>
<td>30</td>
</tr>
<tr>
<td>Station Off Feature</td>
<td>33</td>
</tr>
<tr>
<td>Break Feature</td>
<td>34</td>
</tr>
<tr>
<td>Taut Tape Feature</td>
<td>36</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Special Plans 15 &amp; 18 (Duplex)</th>
<th>Chart No.</th>
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</thead>
<tbody>
<tr>
<td>Connect Station</td>
<td>27 (Plan 15)</td>
</tr>
<tr>
<td>Connect Station</td>
<td>29 (Plan 18)</td>
</tr>
<tr>
<td>Automatic Station Sending</td>
<td>31</td>
</tr>
<tr>
<td>Code Recd While Station Sending</td>
<td>32</td>
</tr>
<tr>
<td>Station Off Feature</td>
<td>33</td>
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<tr>
<td>Break Feature</td>
<td>35</td>
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<tr>
<td>Taut Tape Alarm</td>
<td>37</td>
</tr>
<tr>
<td>Emergency Stop Feature</td>
<td>38</td>
</tr>
</tbody>
</table>

Symbols

(ERX) Indicates that relay is part of the ERX receiver; also all relays in the ERX are not shown (only those directly involving the outlying station control circuit).
CONNECT STATION
PLANS 11, 20, 22, 41, 46 & 47

ERX RECEIVES VALID CONNECT CODE

STARTS TTY MOTOR

ERX RECEIVES DISC CODE AT END OF MESSAGE

PT

HG (ERX)

TA

CLR (ERX)

LINE RELAY OF TTY CONN TO LINE

AB (ERX) SENDS ANSWER BACK

.5 SEC

DA TUBE

DA (NOTE 1)

RB (NOTE 1) — DA TUBE

REMOVES TTY BLIND

MESSAGE RECEIVED FROM LINE

PT

TA

DAB TUBE (ERX)

AB (ERX)

NOTES:
1. RELAYS DA AND RB ARE RELEASED UPON RECEIPT OF ANOTHER CODE AND THE .5 SEC BLINDING TIME REAPPLIED TO GUARD AGAINST PRINTING ANSWER BACKS ON MULTIPLE ADDRESS MESSAGES.
AUTOMATIC STATION SENDING
PLANS 11, 20, 22, 41, 46 & 47
SECTION P.70.909.20
Sequence Charts
Chart 3

TAPE INSERTED IN TD AT STATION
6TH PIN

HG (ERX)

SEARCH CODE RECEIVED BY ERX

AB (ERX) SENDS ANSWER BACK

VALID START CODE RECEIVED

SA (MOMENTARILY)

CLR (ERX) (MOMENTARILY)

PD

HG (ERX)

ST

STARTS TO MOTOR

PT

TA

STARTS TTY MOTOR 1 SEC

DA TUBE

DA

Closes to START MAGNET

Message sent to line

6TH PIN (END OF MESSAGE)

PD

ST

RB

PT

TA

DA

Opens to START MAGNET

CKT RESTORED TO NORMAL
AUTOMATIC STATION SENDING

SECTION P.70.909.20
Sequence Charts
Chart 4

PLANS 12, 13, 14, 19, 21, 42, 43,
44, 45 & 47

TAPE INSERTED IN TD
6TH PIN

HG (ERX) SEARCH CODE RECD

AB (ERX) SENDS AB

VALID START CODE RECD

SA (MOMENTARILY)

CLR (ERX)

PD ST

1 SEC DA TUBE DA

CLOSES TD START MAGNET DA TUBE

MESSAGE SENT TO LINE

6TH PIN (END OF MESSAGE)

PD ST

DA OPENS TD START MAG

SENDING Ckt RESTORED TO NORMAL
CODE RECEIVED (STATION SENDING)
PLANS 12, 13, 14, 19, 21, 42, 43, 44, 45 & 47

MESSAGE BEING SENT TO LINE

- ANY ERX CODE RECD
- LPI (ERX)

- TD START MAG
  - P7 (ERX)
    - DA (BLINDS TTY)
    - P7 (ERX)

  - 1 SEC
    - DA TUBE
    - DA

- REMOVES TTY BLINDS
  - TD START MAG
    - DA TUBE

MESSAGE RESUMES
STATION OFF FEATURE

ALL PLANS

STA OFF KEY (NL)

STA OFF LAMP

SO

PREVENTS OPN.
OF TA-PT-ST AND PD

STATION CONNECT CODE DURING
STATION OFF PERIOD

ERX RECEIVES
VALID CONNECT CODE

ERX PRE-
VENTED
FROM SEND-
ING AB

BUZZER OPERATES
MOMENTARILY FOR
EVERY VALID CONNECT
CODE

START CODE DURING
STATION OFF PERIOD

ERX RECEIVES
VALID START CODE

ERX SENDS
ANSWER BACK
IN NORMAL
MANNER

BUZZER
OPERATES
MOMENTARILY

SEARCH CODE DURING
STATION OFF PERIOD

ERX RECEIVES
SEARCH CODE

NO AB

STATION RESTORED AFTER
STATION OFF PERIOD

RST KEY (NL)

STA OFF
LAMP

SO

CKT RESTORED TO NORMAL
BREAK FEATURE
PLANS 11, 20, 22, 41, 46 & 47

NOTE: BK ALARM ACTIVATED ONLY
WHEN STATION IS TRANSMITTING FROM T-D. RELAYS PD-ST-PD-TA RB AND DA
OPERATED.

L (ERX) OPEN LINE

BSY LAMP

.2 SEC

LPI (ERX)
OPENED TO START MAG
(IF LINE CLOSES BEFORE
CO OPERATES, LPI WILL
RELEASE AND RESTART THE
TD.)

1 SEC

CO TUBE

CO

BUZZER

PD

ST

CO TUBE

STP LAMP

10 SEC

PT

TA

RB

DA

BCO (AMPERITE)

BUZZER

REMOVE TAPE FROM TD
6TH PIN
CO

STATION RESTORED
BSY LAMP WILL LIGHT STEADILY TILL
LINE CLOSES. THE TAPE SHOULD BE
REINSERTED IN TD TO BE RESTARTED
ON NEXT START CODE.
BREAK FEATURE

PLANS 12, 13, 14, 19, 21, 42, 43, 44, 45 & 47

NOTE: ALARM ACTIVATED ON OPEN LINE ONLY WHEN STATION TRANSMITTING FROM T-D RELAYS PD-ST-DA OPERATED.

L (ERX) DUE TO OPEN LINE

-X BSY LAMP

- .2 SEC

1 SEC

-X LPI (ERX)

-X TD START MAGNET

(TD WILL RESTART IF LINE CLOSES BEFORE CO OPERATES)

-X CO TUBE

-X CO

-X BUZZER

-PD ST CO TUBE DA X STP LAMP

-X BCO (AMPERITE)

-X BUZZER

- 10 SEC

- REMOVE TAPE FROM GATE

- 6TH PIN

- CO

STATION RESTORED

NOTE: NORMALLY TAPE WILL BE REINSERTED IN GATE AND WILL BE RESTARTED ON NEXT VALID START CODE.
EMERGENCY STOP FEATURE

PLAN 12, 13, 14, 19, 21, 42, 43, 44, 45 & 47

NOTE: EMS CODE ACTIVATES ALARM ONLY WHEN STATION IS TRANSMITTING. RELAYS PD-ST-DA OPERATED.

EMS CODE REC'D

LP1 (ERX)

OPENS TD START MAG

P7 (ERX)

DA

CO

BUZZER

PD

ST

STP LAMP

KEEPS TD START MAG OPEN

REMOVE TAPE FROM TD 6TH PIN CO

BCO (AMPERITE)

BUZZER

10 SECS

STATION RESTORED

NOTE: NORMALLY TAPE WOULD BE REINSERTED IN TD AND BE RESTARTED ON NEXT START CODE.
TAUT TAPE ALARM
PLANS 11, 20, 22, 41, 46 & 47

STAION TRANSMITTER STARTED SENDING IN NORMAL MANNER RELAYS PD-ST-PT-TA-RB AND DA OPERATED

TAUT TAPE
CO

BUZZER
PD
ST
STP LAMP

RB
PT
TA
OPENS START MAG
DA

10 SEC

BCO (AMPERITE)
BUZZER

REMOVE TAPE FROM TD
6TH PIN
CO

STP LAMP

STATION RESTORED TO NORMAL
KEYBOARD OPTION AA
PLANS 11,20,22,41,46 & 47

STATION CONNECTED TO LINE IN NORMAL MANNER AND RELAY CENTER REQUESTS STATION TO ANSWER KBD. RELAYS TA-DA-RB-PT AND HG (ERX) ARE OPERATED.

KB KEY (ML)  KB ON-LINE LAMP

DISABLE BREAK FEATURE  OPENS TD START MAG  UNBLINDS KBD

RELAY CENTER AND STATION COMMUNICATE BY KBD.

ERX RECEIVES DISC CODE  P2 (ERX)

KB ON-LINE LAMP  KB

P7 (ERX)

DA  RB

HG (ERX)

PT  TA

DAB TUBE (ERX)

AB (ERX) SENDS AB

STATION RESTORED TO NORMAL
STATION CONNECTED TO LINE IN NORMAL MANNER AND RELAY CENTER REQUESTS STATION TO ANSWER KBD. RELAYS PT-TA-RB AND HG (ERX) OPERATED.

<table>
<thead>
<tr>
<th>KB-ON-LINE LAMP</th>
<th>KB</th>
<th>DISABLE BREAK FEATURE</th>
<th>UNBLINDS KBD</th>
<th>ST (19ASR SWITCHED TO SEND LOOP)</th>
<th>TD START MAG OPEN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 SEC</td>
<td>DA TUBE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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STATION AND RELAY CENTER COMMUNICATE VIA KBD. (19ASR COPIES SENDING RO COPIES REC)

<table>
<thead>
<tr>
<th>GRD KEY (NL)</th>
<th>DISC CODE RECD</th>
<th>GRD KEY (NL)</th>
<th>DISC CODE RECD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KB-ON-LINE LAMP</td>
<td>DA</td>
<td>KB</td>
<td>HG (ERX)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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RB

<table>
<thead>
<tr>
<th>PT</th>
<th>TA</th>
</tr>
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<tbody>
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<td></td>
<td></td>
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<td></td>
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</table>

RESTORED TO STATION NOT CONNECTED CONDITION
KEYBOARD OPTION AA

PLANS 14 & 44

STATION CONNECTED IN NORMAL MANNER AND RELAY CENTER REQUESTS STATION TO ANSWER KBD, RELAYS PT-TA-RB AND HG (ERX) OPERATED.

KB KEY (NL)

KB-ON-LINE LAMP

KB

KB CONNECTED TO SEND LOOP TD START MAG OPEN DISABLE BREAK FEATURE

STATION AND CENTER COMMUNICATE, THE STATION SENDS BLIND.

DISC CODE RECD

P2 (ERX)

KB

KB-ON-LINE LAMP

HG (ERX)

RB DAB TUBE (ERX)

TA

PT

AB (ERX) (SENDS AB)

RESTORED TO STATION NOT CONNECTED CONDITION

SEC970.909.20
Sequence Charts
Chart 14
NOTE: 1. IF STATION WAS CONNECTED
AT TIME THE PRIORITY MESSAGE
WAS INITIATED THE HG WOULD
BE OPERATED AND REMAIN OPERATED
AND LEAVE STATION CONNECTED
AFTER PRIORITY MESSAGE WAS SENT.

INSERT TAPE IN TD
6TH PIN

HG (ERX) (NOTE 1)
PRI KEY (NL)
GRD KEY (NL)

PS

IF PRIORITY SEQUENCE DOES NOT START
WITHIN 60 SECONDS THE RLS (AMPERITE)
OPERATES AND RELEASES THE PS

3 SEC

CO TUBE
SA

HG (ERX) (NOTE 1)
P0
ST
CO TUBE

TA
PT

PS
CLOSES LINE

1 SEC

DA TUBE
DA

CLOSES TD START MAGNET

PRIORITY MESSAGE SENT

6TH PIN (END OF MESSAGE)

PD
ST

PT
TA
RB

OPENS TD START MAGNET

SA

STATION RESTORED TO NORMAL
PRIORITY START FEATURE OPTION BB

SECTION P.70.909.20
Sequence Charts
Chart 16

PLANS 12, 13, 14, 19, 21, 42, 43,
44, 45 & 47

INSERT TAPE IN TD
6TH PIN

HG (ERX)

PRI KEY (NL)

GRD KEY (NL)

PS

IF EMS CODE IS NOT RECEIVED WITHIN
60 SECONDS THE RLS (AMPERITE)
OPERATES AND RELEASES THE PS

EMS CODE RECEIVED
(EMS INITIATED BY RELAY CENTER
IN RESPONSE TO THE BREAK)

SA (MOMENTARILY)

PD

ST

SEC

DA TUBE

DA

Closes TD START MAGNET

PRIORITY MESSAGE SENT TO LINE

6TH PIN (END OF MESSAGE)

PD

ST

DA

OPENS TD START MAGNET

STATION RESTORED TO NORMAL
TYPE I AUXILIARY SEND FEATURE OPTION FF

STATION CONNECTED IN NORMAL MANNER, RELAYS TA-DA-RB-PT AND HG (ERX) OPERATED.

1. INSERT TAPE IN TD
2. 6TH PIN
3. KB KEY (NL)
4. KB
5. KB-ON-LINE LAMP

DISABLE BX FEATURE

TD START MAG OPEN

1. GRD KEY (NL)
2. DA
3. SA (MOMENTARILY)
4. RB
5. ST
6. PD
7. KB
8. KB-ON-LINE LAMP

I. SEC

1. DA
2. TUBE
3. DA

1. DA TUBE
2. RB
3. CLOSES TO START MAG
4. MESSAGE SENT TO LINE
5. 6TH PIN (END OF MESSAGE)
6. ST
7. PD
8. OPENS TO START MAG

TTY REMAINS CONNECTED TILL DISCONNECT CODE RECD

1. DISC CODE RECD
2. P7 (ERX)
3. HG (ERX)
4. DA
5. RB

1. PT
2. TA
3. DAB (ERX)

STATION RESTORED

1. AB (ERX) SENDS AB

SECTION P.70.909.20
Sequence Charts
Chart 17
TYPE 2 AUXILIARY SEND FEATURE OPTION FF

SECTION P.70.909.20
Sequence Charts
Chart 18

STATION CONNECTED IN NORMAL MANNER, RELAYS TA-DA-RB-PT AND HG (ERX) OPERATED.

- INSERT TAPE IN TD
- 6TH PIN
- KB KEY (NL)
- KB

DISABLE BREAK FEATURE
TD START MAG OPEN

GRD KEY (NL)

KB-ON-LINE LAMP

DA

RB

SA (MOMENTARILY)

ST

PD

HG (ERX)

KB

KB-ON-LINE LAMP

IF KBD OPTION PROVIDED

1 SEC

DA

TUBE

DA

RB

DATUBE

CLOSES TD START MAG

MESSAGE SENT TO LINE

6TH PIN (END OF MESSAGE)

ST

PD

PT

TA

RB

OPENS TD START MAG

DA

STATION RESTORED TO NORMAL
AUXILIARY SEND FEATURE OPTION FF

PLAN 12-13 & 42-43

STATION CONNECTED IN NORMAL MANNER
RELAYS PT-TA-RB AND RG (EXK) OPERATED
- INSERT TAPE IN T-D
- 6TH PIN

- KB KEY (NL)
- KB
- 1B-ON-LINE LAMP

- T-O START MAGNET
- PD
- ST
- 1 SEC
- DA TUBE
- DA

- STATION AND RELAY CENTER MAY COMMUNICATE BY KB

- GRD KEY (NL) (NOTE 1)
- SA (MOMENTARILY)
- KB
- T-O START MAGNET

NOTE: 1. IF KBG OPTION AA IS NOT PROVIDED OR THE STATION IS NOT REQUESTED TO COMMUNICATE KBG, THE GRD KEY MAY BE OPERATED IMMEDIATELY AFTER THE KB KEY.

MESSAGE IS SENT AND STATION MAY CONTINUE TO SEND MESSAGES IN THE ABOVE MANNER TILL THE STATION IS DISCONNECTED.

AUXILIARY SEND FEATURE OPTION FF

PLAN 14 OR 44

STATION CONNECTED IN NORMAL MANNER
RELAYS PT-TA-RB AND RG (EXK) OPERATED
- INSERT TAPE IN T-D
- 6TH PIN

- KB KEY (NL)
- KB
- 1B-ON-LINE LAMP

- T-O START MAGNET
- STATION AND CENTER MAY COMMUNICATE BY KB

- GRD KEY (NL) (NOTE 1)
- SA (MOMENTARILY)
- KB
- T-O START MAGNET

MESSAGE IS SENT AND STATION MAY CONTINUE TO SEND MESSAGES IN THE ABOVE MANNER TILL THE STATION IS DISCONNECTED.
REMOTE RESTORATION OF STP ALARM OPTION HH

SECTION P.70.909.20
Sequence Charts
Chart 21

ALL PLANS

- CO (DUE TO EMS OR BREAK ETC)
- TRANSMITTER STOPPED IN MIDDLE OF MESSAGE
- MC CODE RECD
- CO

STATION TRANSMITTER MAY NOW BE STARTED IN NORMAL MANNER AND BALANCE OF MESSAGE SENT IF CO WAS OPERATED DUE TO EMS OR BREAK AND NOT A TAPE JAM.

REMOTE RESTORATION OF STATION-OFF OPTION II

Chart 22

ALL PLANS

- STA-OFF KEY (NL)
- STA-OFF LAMP
- SO

STATION LEFT IN THIS CONDITION IN ERROR

- BREAK OR EMS RECEIVED
- CO TUBE
- CO (MOMENTARILY ON EMS CODE OR DURATION OF BK) (NOTE 1)
- BUZZER
- SO
- STA-OFF LAMP
- SO
- CO TUBE

STATION RESTORED AND RELAY CENTER MAY NOW SEND TO STATION

NOTE: 1. IF TAPE WERE IN T-D AT THIS TIME A STP ALARM WOULD BE REGISTERED PER CHART 7 (PLAN II) OR CHART 9 (PLANS 12-13-14).
MANUAL TAPE FEED OUT OPTION EE
ALL PLANS

NOTE: MANUAL FEED OUT OPERATES ONLY WHEN STATION NOT CONNECTED.
ADDITION OF AN RO OR ROTR PER SUB PLANS
ALL PLANS

NOTE: THE ADDED RO OR ROTR MAY BE CONNECTED BY ITSELF OR IN ADDITION TO CUSTOMERS REGULAR RECEIVING EQUIPMENT, DEPENDING UPON NEEDS OF CUSTOMER. THE BLINDS PROVIDED FOR REGULAR RECEIVING EQPT ALSO SERVE THE ADDED RO OR ROTR.
CONNECT STATION
SPL PLAN 16 (SINGLE)

ERX RECEIVES
VALID CONN CODE

PT MG (ERX) TA FO CLR (ERX)

BLINDS TTY LINE RELAY OF
TTY CONN TO LINE AB (ERX) SENDS AB

.5 SEC

DA TUBE
DA R8

DA TUBE

REMOVES TTY BLIND

THE MESSAGE TTY IS CONNECTED AT THIS POINT AND IF
THE RELAY CENTER DESIRES TO CONNECT 2ND MACHINE
THE MASTER CONN CODE WOULD BE READ AT THIS TIME

ERX RECEIVES MASTER CONN CODE

P2 (ERX)

BLINDS TTY

P7 (ERX)

DA
R8

2ND MACHINE
BLINDED

TA (DISC
MSG TTY)

.5 SEC

DA TUBE
DA

DA TUBE
R8

REMOVES TTY BLIND

2ND MACHINE IS NOW CONNECTED TO RECEIVE MESSAGE

ERX RECEIVES DISC. CODE AT END OF MESSAGE

P2 (ERX)

BLINDS TTY

P7 (ERX)

DA HG (ERX)
R8

FO

2ND MACHINE (ERX)

AB (ERX) SENDS AB

PT

TB

STATION RESTORED
CONNECT STATION
SPL PLAN 15 (DUPLEX)

ERX RECEIVES VALID CONN. CODE

* PT
* HG (ERX)
* TA
* F0
* CLR (ERX)

* RB
* AB (ERX) SENDS AB

REMOVES TTY BLIND

THE MESSAGE TTY IS NOW CONNECTED AND IF
THE RELAY CENTER DESIRES TO CONNECT 2ND MACHINE
THE MASTER CONN CODE IS RECEIVED AT THIS POINT.

ERX RECEIVES MASTER CONN CODE

* P2 (ERX)

BLINDS TTY

* TB
* CLR (ERX)
* AB (ERX) SENDS AB

PT REMAINS OPERATED AND WILL RLS UPON RECEIPT OF DISC

2ND MACHINE ONLY NOW COPIES INCOMING MESSAGE

ERX RECEIVES DISC CODE AT END OF MESSAGE

* HG (ERX)
* F0
* RB
* DAB TUBE (ERX)

PT
* PR
* TB
* AB (ERX) SENDS AB

RESTORED TO STATION NOT CONNECTED CONDITION
SELECT P.70.909.20
Sequence Charts
Chart 28

CONNECT STATION
SPL PLAN 17 (SINGLE)

ERX RECEIVES VALID
CONNECT CODE

HG (ERX)  TB

CLR (ERX)

LINE RELAY
OF ROTR CONN.
TO LINE

AB (ERX) SENDS AB

PR

STARTS
ROTR
MOTOR

FO

.5 SEC

DA TUBE

DA

RB

DA TUBE

MESSAGE RECEIVED

ERX RECEIVES DISC.
CODE AT END OF MESSAGE

P2 (ERX)

P7 (ERX)

BLINDS TTY

DA

RB

HG (ERX)

TB

DAB TUBE (ERX)

AB (ERX) SENDS AB

L (FEED OUT CKT)

ROTR
FEEDS
OUT
TAPE

TS (FEED OUT CKT)

FO

PR

L (FEED OUT CKT)

STATION RESTORED TO NORMAL
CONNECT STATION
SPL PLAN 18 (DUPLEX)

ERX RECEIVES VALID CONNECT CODE

MG (ERX) TB CLR (ERX)

PR FO RB

STARTS ROTR MOTOR

MESSAGE RECEIVED BY ROTR

ERX RECEIVES DISC. CODE AT END OF MESSAGE

P2 (ERX)

BLINDS TTY

HG (ERX) TB RB

DAB (ERX)

AB (ERX) SENDS AB

L (FEED OUT CKT)

ROT R FEEDS OUT TAPE

TS (FEED OUT CKT) FO

PR L (FEED OUT CKT)

RESTORED TO STATION NOT CONNECTED CONDITION
AUTOMATIC STATION SENDING
SPL PLANS 16-17

TAPE INSERTED IN TD AT STATION
6TH PIN

HG (ERX)

SEARCH CODE RECD BY ERX

AB (ERX) SENDS AB

VALID START CODE RECD

SA (MOMENTARILY)

CLR (ERX)

ST

PD

HG (ERX)

STARTS T-D MOTOR

TA

PT

1 SEC

STARTS MSG TTY MOTOR (PLAN 16)

DA TUBE

DA

TD START MAGNET

DA TUBE

RB

MESSAGE SENT TO LINE (MSG TTY COPIES PLAN 16) (SENS BLIND PLAN 17)

6TH PIN (END OF MESSAGE)

PD

ST

RB

PT

TA

TD START MAGNET

DA

Ckt restored to normal
AUTOMATIC STATION SENDING
SPL PLANS 15-18

TAPE INSERTED IN TD

6TH PIN

HG (ERX)

ERX RECEIVES SEARCH CODE

AB (ERX) SENDS AB

VALID START CODE REC'D

SA (MOMENTARILY)

CLR (ERX)

AB (ERX) SENDS AB

PD

STARTS TD MOTOR ALSO ON PLAN 15 STARTS TTY MOTOR

1 SEC

DA TUBE

DA

T.D. START MAGNET

DA TUBE

MESSAGE SENT TO LINE (19ASR COPIES PLAN 16) (SENDS BLIND PLAN 18)

6TH PIN (END OF MESSAGE)

PD

ST

DA OPENS T.D. START MAG

SENDING Ckt RESTORED TO NORMAL
STA OFF KEY (ML)

STA-OFF LAMP

PREVENTS OPEN OF TA-TB-ST-PT-PD-PR

STA OFF CONNECT CODE
RECEIVED DURING STATION OFF PERIOD

ERX RECEIVES VALID CONNECT CODE

ERX PREVENTED FROM SENDING AB

BUZZER OPERATES MOMENTARILY FOR EVERY VALID CONNECT CODE

START CODE RECEIVED DURING STATION OFF PERIOD

ERX RECEIVES VALID START CODE

BUZZER OPERATES MOMENTARILY

ERX SENDS ANSWER BACK IN NORMAL MANNER

SEARCH CODE RECEIVED DURING STATION OFF

ERX RECEIVES SEARCH CODE

NO AB SENT

STATION RESTORED AFTER STATION OFF PERIOD

ERX SENDS ANSWER BACK IN NORMAL MANNER

STA-OFF LAMP

STATION RESTORED TO NORMAL
BREAK FEATURE
SPL PLANS 16-17

NOTE: BK ALARM ACTIVATED ONLY
WHILE STATION IS TRANSMITTING
RELAYS PD-SD-PT-TA-RB AND
DA OPERATED.

- L (ERX) OPEN LINE
  - BSY LAMP
    - 0.2 SEC
    - LPI (ERX)
      - OPENS TD START MAG
      - (IF LINE CLOSES BEFORE
        CO OPERATES, LPI WILL
        RLS AND RESTART TD)
    - CO TUBE
    - CO
  - BUZZER
  - PD
    - ST
    - CO TUBE
    - STP LAMP
  - 10 SEC
    - BCO (AMPERITE)
    - BUZZER
  - PT
    - TA
      - RB
    - DA
    - REMOVE TAPE FROM TD
      - 6TH PIN
      - CO
      - STP LAMP

STATION RESTORED

BSY LAMP WILL LIGHT STEADILY
TILL LINE CLOSES. THE TAPE
SHOULD BE REINSERTED IN TD
TO BE RESTARTED ON NEXT START
CODE.
BREAK FEATURE
SPL PLANS 15-18

NOTE: BK ALARM ACTIVATED
ONLY WHEN STATION IS
TRANSMITTING, RELAYS
PD-ST-DA OPERATED.

L (ERX) DUE TO OPEN LINE

* BSY LAMP

.2 SEC

1 SEC

* LP1 (ERX)

TD START MAGNET
(TD WILL RESTART IF
LINE CLOSES BEFORE
CO OPERATES.)

* CO TUBE

* CO

BUZZER

PD

ST

CO TUBE

DA

STP LAMP

10 SEC

* 3CO (AMPEREITE)

BUZZER

REMOVE TAPE FROM GATE
6TH PIN
CO

STATION RESTORED

BSY LAMP WILL LIGHT STEADILY
TILL LINE CLOSES. THE TAPE
SHOULD BE REINSERTED IN T.D.
TO BE RESTARTED ON NEXT START
CODE.
TAUT TAPE ALARM
SPL PLANS 16-17

STATION TRANSMITTING TO LINE
RELAYS PD-ST-PT-TA-RB AND DA OPERATED

TAUT TAPE
CO

BUZZER

PD
ST

STP LAMP

RB
PT

TA
DA
TD START MAG

10 SEC

BCO (AMPERITE)
BUZZER

REMOVE TAPE FROM TD
6TH PIN
CO

STP LAMP

STATION RESTORED TO NORMAL
EMERGENCY STOP FEATURE
SPL PLANS 15-18

NOTE: EMS CODE ACTIVATES ALARM ONLY WHEN STATION IS TRANSMITTING.

STATION TRANSMITTING TO LINE RELAYS PD-ST-DA OPERATED

× EMS CODE RECD

× LP1 (ERX)

→ TD START MAGNET

→ P7 (ERX)

→ DA

× CO

→ ST

× STP LAMP

× BUZZER

→ PD

→ ST

→ KEEPS TD START MAG OPEN

10 SEC

× BCO (AMPERITE)

→ BUZZER

→ REMOVE TAPE FROM TD

→ 6TH PIN

→ CO

→ STP LAMP

STATION RESTORED