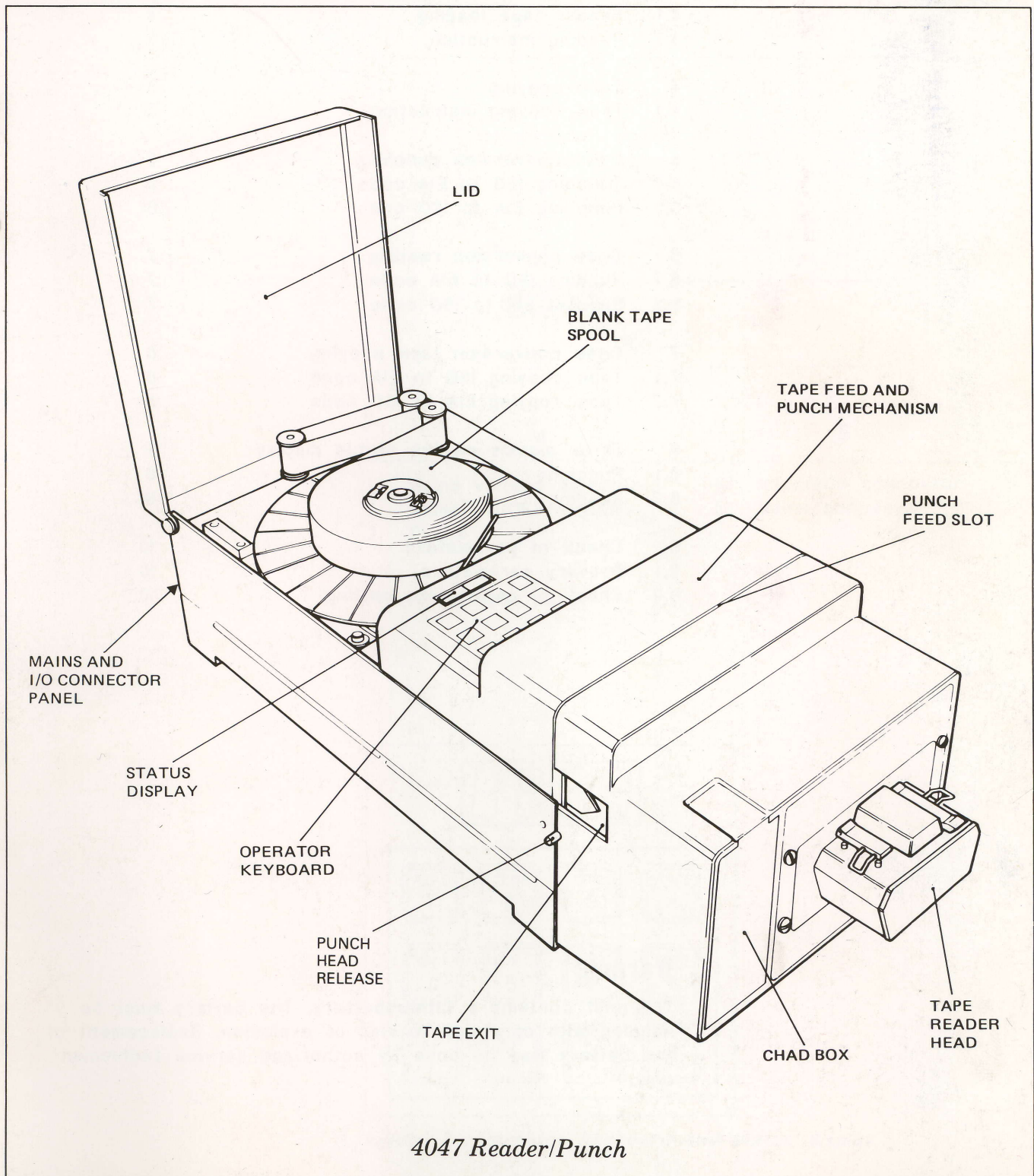


Facit 4046/4047

Punch/Reader-Punch IEEE-488

Operator guide

Edition 1



Contents

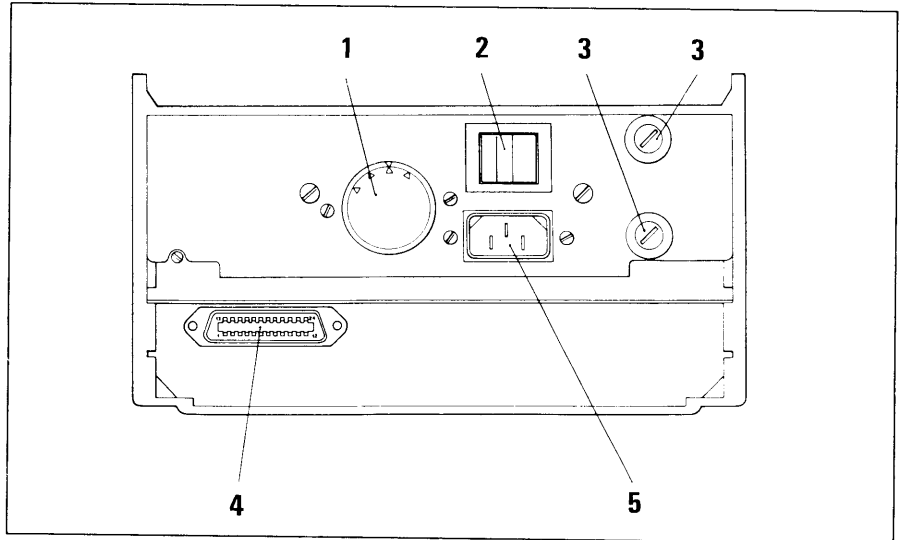
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Warning

This unit contains a **Lithiumbattery**. The battery must be handled with care due to risk of explosion. Replacement of the battery may be done by authorized service technician only.

1 Mains connection

- Check that the mains voltage selector on the rear panel, see figure 1, shows the actual mains voltage.
- Connect the delivered mains cord to the rear panel mains connector and the mains.
- Switch the ON/OFF toggle switch on the rear panel to the ON position.
- Check that the status display, see figure 2, shows OFF.
- Check the fuses F1A and T2A on the rear panel if the status display remains extinguished.



- | | | | |
|---|------------------------|---|---------------------|
| 1 | Mains voltage selector | 4 | Interface connector |
| 2 | Mains ON/OFF switch | 5 | Mains connector |
| 3 | Fuses | | |

Figure 1 Rear panel

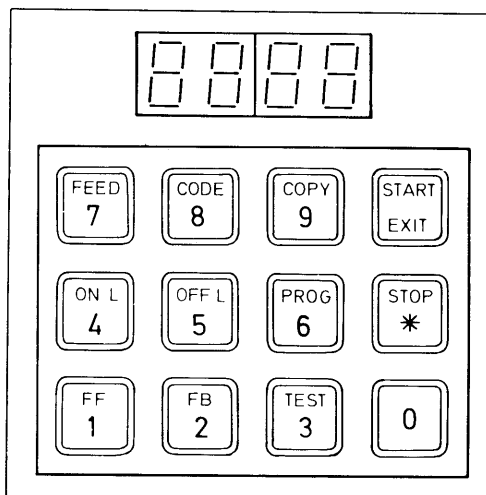
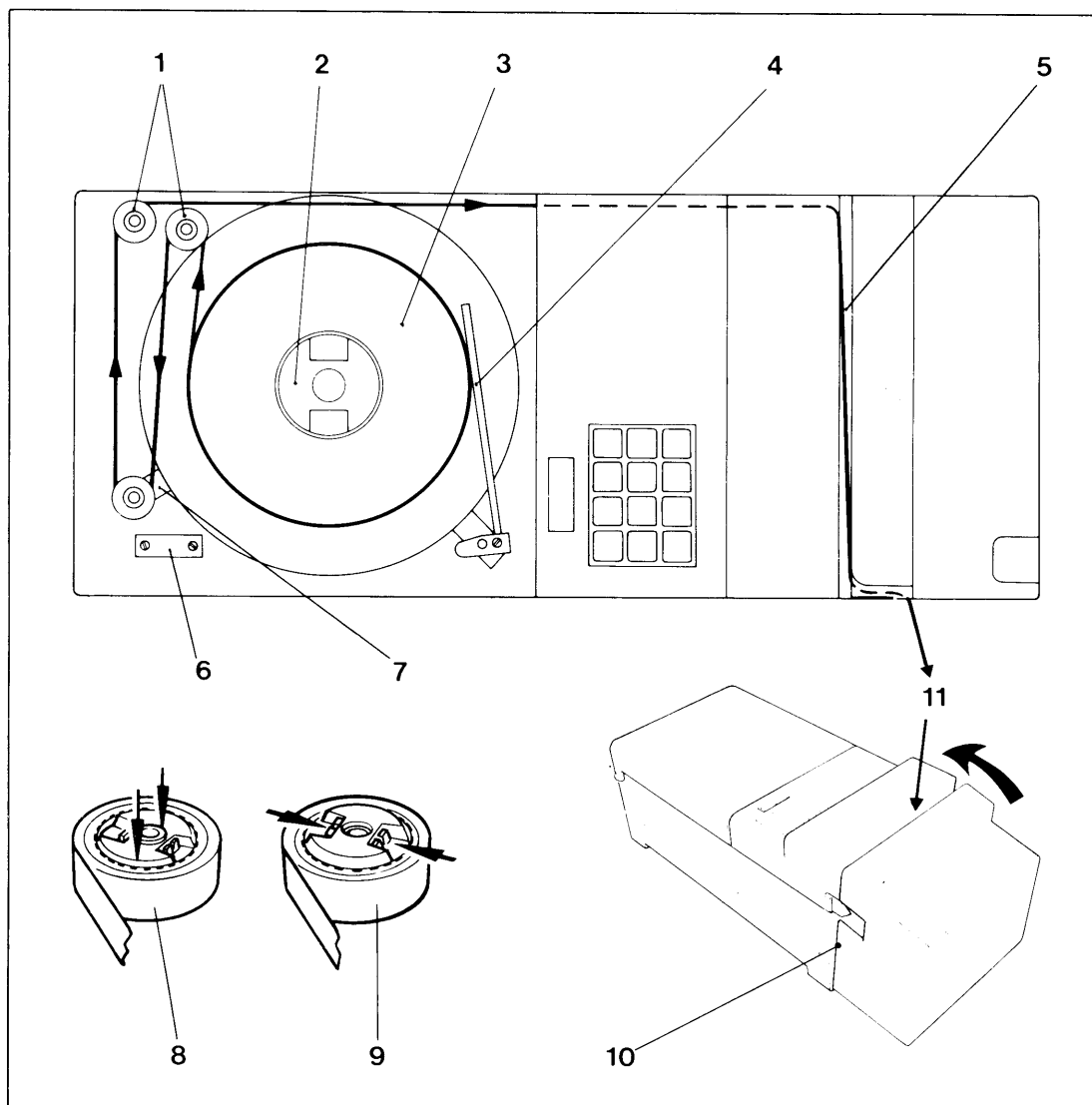


Figure 2 Operator keyboard and status display

2 Punching

2.1 Punch tape loading

With the mains power switched OFF, load tape onto the punch tape bobbin as follows (see figure 3 below).



- | | | | |
|---|--------------------------|----|-----------------------|
| 1 | Guide pulleys | 6 | Magnetic catch |
| 2 | Bobbin | 7 | Guide arm with pulley |
| 3 | Blank tape spool | 8 | Bobbin lock |
| 4 | Tape low detector | 9 | Bobbin release |
| 5 | Tape feed and punch slot | 10 | Punch head release |
| | | 11 | Punch feed slot open |

Figure 3 Punch tape loading

- Move the tape guide arm until it touches the magnetic catch.

This action applies the brake to the tape bobbin and frees the tape feed and punch mechanism.

- Pull out about 2 metres (6 feet) of tape from the new reel and place the reel onto the bobbin with the free end running as shown.
- Lock the bobbin by pushing the centre section downwards by hand as far as possible (see figure 3).
- Push the two punch head releases upwards (located one at each side of the punch housing) and pull the punch assembly forward to open the tape feed and punch slot (see figure 3).
- Lead the tape around the guide pulleys and drop it into the tape feed and punch slot.
- Push back the punch assembly to close the tape feed and punch slot.
- Release the tape guide arm from the magnetic catch.
- Switch the power ON and depress the FEED key until the tape is tight and feeding correctly from the spool with feed holes punched.
- Depress the CODE key.
All tracks will be punched.
- Check that the holes are punched properly.

2.2 Punching instruction

- Connect the NC/Computer cable plug to the CHANNEL 1 I/O PORT connector on the rear panel (see figure 1).
- Depress the key ON L on the operator keyboard.
The status display shows LINE.
- Start the punching from the NC/Computer.

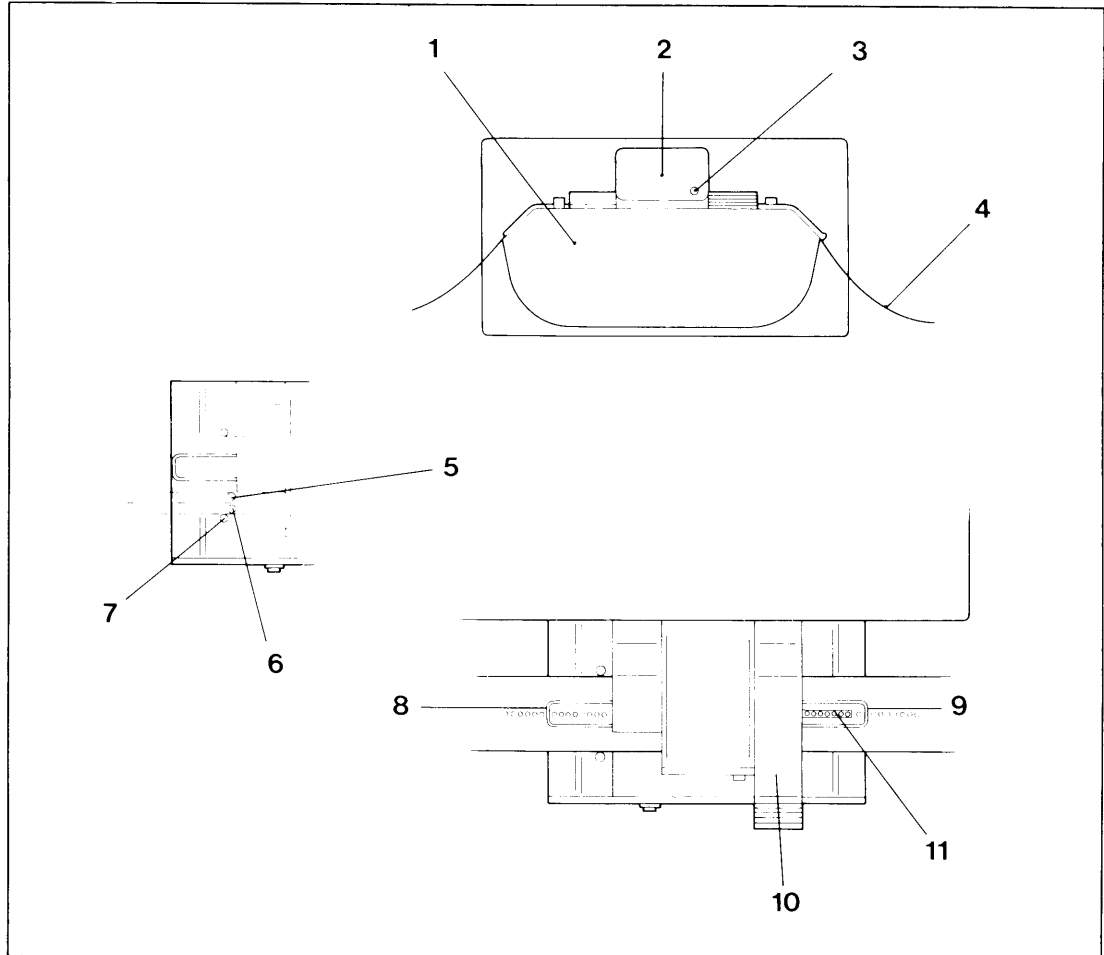
NOTE. The data transmission should be made at 600 bit/s (Baud).

- Tear off the tape when the punching is ready.

If required, blank tape can be fed by depressing OFF L and FEED before tearing off the tape.

3 Reading

3.1 Reader tape loading (4047 Reader/Punch only).
Load tape into the reader as follows (see figure 4 below).



- | | | | |
|---|---|----|---|
| 1 | Reader | 6 | Guide for 6/7 track tapes.
Operated as the 5 track tape guide. |
| 2 | Reader head | 7 | Fixed guide for 8 track tape |
| 3 | Optical reader indicator | 8 | Entry guide |
| 4 | Tape | 9 | Exit guide |
| 5 | Guide for 5 track tape.
Press the guide upwards from the
underside of the reader.(Press
down when 6/7 or 8 track tapes
are used). | 10 | Lift bar |
| | | 11 | Drive sprocket |

Figure 4 Reader tape loading

- Raise the lift bar to open the entry and exit guides.
- Select the appropriate tape guides (see figure 4) for the tape which is to be used (5,6/7 or 8 track).
- Put the tape into the reader and over the drive sprocket.
- Lower the lift bar to hold the tape in position; ensure that the tape feed holes are engaged correctly in the drive sprocket.

3.2 Reading instruction

- Depress the ON L key on the operator keyboard.
The status display shows LINE.
- Clear the NC/Computer for reading.

- Depress the START key to start the reading.
- Depress the STOP key to stop the reading.
- Depress the START key to restart the reading.

Because reading is faster than transmission, the reader can stop before the whole tape is read. The reader will restart automatically and continue until the whole tape is read.

The tape can be run quickly through the reader either forwards or reverse, without data being read, by depressing the FF or FB key respectively. The equipment must be off line.

4 Tape copying

4.1 Tape copying instruction

- Depress the OFF L key on the operator keyboard.
The status display shows OFF.
- Depress the COPY key.
The status display shows COPY.
- Put the tape in the reader.
- Depress the START key.
Copying will start.
- Depress the OFF L and ON L keys when copying is finished.

If the reader stops during copying, it is due to the fact that the reader is faster than the punch. The copying will restart automatically and continue until the whole tape is copied.

5 Code conversion punching

Code conversion punching from ISO to EIA standard and vice versa a parameter in program step 5 is changed according to the table below. This parameter is normally set to 0. After code conversion the parameter should be reset to 0.

5.1 Punching ISO to EIA code

-Set up the following sequence on the operator keyboard:

Press key	Display shows	Comment
OFF L	OFF	
PROG	Prog	
*	1	
5	5	Progr. step 5
*	0	Parameter=0
12 (ISO to EIA)	12	Parameter changed to 12
*	6	Progr. step 6
EXIT	OFF	
ON L	Line	

-Start punching.

If the transmission of data is terminated with the control character DC 4, the punching will be followed by blank tape automatically. If not, depress OFF L and FEED to feed some blank tape before tearing off.

5.2 Punching EIA to ISO code

-Set up the following sequence on the operator keyboard:

Press key	Display shows	Comment
OFF L	OFF	
PROG	Prog	
*	1	
5	5	
*	0	
112 (EIA to ISO)	112	Parameter changed to 112
*	6	
EXIT	OFF	
ON L	Line	

-Start punching.

6 Code conversion reading

Code conversion reading from ISO to EIA standard and vice versa a parameter in program step 7 is changed according to the table below. This parameter is normally set to 0.

After code conversion the parameter should be reset to 0.

6.1 Reading ISO to EIA code

-Set up the following sequence on the operator keyboard:

Press key	Display shows	Comment
OFF L	OFF	
PROG	Prog	
*	1	
7	7	Progr. step 7
*	0	Parameter=0
12 (ISO to EIA)	12	Parameter changed to 12
*	8	Progr. step 8
EXIT	OFF	
ON L	Line	

-Start reading.

6.2 Reading EIA to ISO code

-Set up the following sequence on the operator keyboard:

Press key	Display shows	Comment
OFF L	OFF	
PROG	Prog	
*	1	
7	7	
*	0	
112 (EIA to ISO)	112	Parameter changed to 112
*	8	
EXIT	OFF	
ON L	Line	

-Start reading.

7 Code conversion tape copying

Code conversion tape copying from ISO to EIA standard and vice versa a parameter in program step 6 is changed according to the set up below. This parameter is normally set to 0.

After code conversion the parameter should be reset to 0.

7.1 Tape copying ISO to EIA code

-Set up the following sequence on the operator keyboard:

Press key	Display shows	Comment
OFF L	OFF	
PROG	Prog	
*	1	
6	6	Progr. step 6
*	0	Parameter=0
12 (ISO to EIA)	12	Parameter changed to 12
*	7	Progr. step 7
EXIT	OFF	
COPY	Copy	

-Put the ISO tape into the reader.

-Depress START.

Copying in EIA code is started.

-Depress OFF and ON L when copying is terminated.

7.2 Tape copying EIA to ISO code

-Set up the following sequence on the operator keyboard:

Press key	Display shows	Comment
OFF L	OFF	
PROG	Prog	
*	1	
6	6	
*	0	
112 (EIA to ISO)	112	Parameter changed to 112
*	7	
EXIT	OFF	
COPY	Copy	

-Put the EIA tape into the reader.

-Depress START.

Copying in ISO code is started.

-Depress OFF and ON L when copying is terminated.

8 Error signals on the status display

8.1 Punching

Display shows	Comment
Lo (Tape low)	The tape is almost finished and the tape roll should be changed as soon as possible. The punching will not be affected.
Err (Error)	<ol style="list-style-type: none"> 1.The tape is finished. The punching cannot be continued until the tape roll is changed. 2.Tape jam. Check the tape in the tape equipment.

-When the error is corrected, depress the ON L key.

8.2 Reading

Display shows	Comment
Err (Error)	<ol style="list-style-type: none"> 1.There is no tape in the reader. 2.Tape jam in the reader. Check the tape. 3.The tape is not correctly punched. The tape cannot be read.

-When the error is corrected, depress the START key.

9 Check of parameters

9.1 Delivery parameters

The 4046 Punch and the 4047 Reader/Punch are delivered with the following parameters setting:

Program step	Parameter	Comment
1	2	Punch/Reader address
2	0000	Service Request Punch
3	000	Service Request Reader
4	1000	Punch mode, IEEE/Punch/Reader Parity
5	0	Transparent Punch
6	0	Transparent copy
7	0	Transparent reading
8	60	Time out
9	0000	Control Code Processing
10	3500	End address for Punch Buffer
11-1 - 12-4	0000	
13-1	10	Line feed
13-2 - 14-4	0000	
15-1	20	Control character DC 4
15-2 - 20-4	0000	

9.2 Check of parameters setting

-Set up the following sequence on the operator keyboard:

Press key	Display shows	Comment
OFF L	OFF	
PROG	Prog	
*	1	Progr. step 1
*	2	Parameter=2
*	2	Program step 2
*	0000	Parameter=0000
*	3	Program step 3
--	--	--
--	--	--
--	--	--
EXIT	OFF	
ON L	Line	

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