

HIGH SPEED TAPE READER

(CX TYPE)

DISASSEMBLY AND REASSEMBLY

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1. GENERAL

1.01 This section is reissued to add the disassembly procedures for the two piece cover plate assemblies on the tape readers, and to change the title.

1.02 This section contains the specific disassembly instructions for type 1A, 2A, and 2A special tape readers and their associated bases, gears, and motors, and where necessary, contains the detailed reassembly information. Unless otherwise specified herein, the general routines for maintaining this apparatus, the tools and materials to be used, and their methods of application are the same as those shown in the sections giving general maintenance information for teletypewriter apparatus.

1.03 The following Bell System Practice provides additional information that may be required in connection with this section.

SUBJECT	SECTION
Numerical Index - Division 592	
Data Sets 200 Series	592-000-000

2. DISASSEMBLY AND REASSEMBLY

2.01 While unsoldering leads from the terminals, the thermoplastic tubing over the leads might be damaged. If this happens, replace the tubing. Avoid using an excessive

amount of solder and take care that no solder falls or becomes wedged between moving parts.

MOTOR UNIT

2.02 To remove the motor unit from the tape reader base, proceed as follows:

- (1) Disconnect the motor cable assembly leads from the terminal block on the base.
- (2) Remove the four screws and lockwashers that secure the motor unit to the left and right rails on the base.
- (3) Lift the motor unit from the base.

2.03 When replacing the motor unit, position it on the base so that the motor pinion and the tape reader gear mesh. Proceed as follows:

- (1) Line up the holes in the motor bracket with the tapped holes in the left and right rails on the base.
- (2) Replace the four mounting screws and lockwashers, but leave these screws finger tight.
- (3) Check, and if necessary remake the gear mesh adjustment as specified in Section 592-801-700.
- (4) Reconnect the motor cable assembly leads to the terminal block and tighten the mounting screws.

TAPE READER

2.04 To remove the tape reader from the tape reader base, proceed as follows:

- (1) Remove the three screws and lockwashers that secure the tape reader to the left and right rails on the base.
- (2) Lift the tape reader from the base.

SECTION 592-801-702

2.05 When replacing the tape reader proceed as follows:

- (1) Carefully place it on the base so that the connector plug mates properly with the connector on the base.
- (2) Replace the three mounting screws and lockwashers, but leave them fingertight.
- (3) Check, and if necessary remake the gear mesh adjustment as specified in Section 592-801-700.
- (4) Tighten the mounting screws.
- (5) Manually rotate the flywheel and check for proper operation and freedom from binding between parts before energizing the tape reader.

Plate Assemblies

2.06 Three unit cover plate assemblies are removed from the reader in the following manner:

- (1) The cover plate is removed by lifting its left side and carefully pulling it off the left side of the reader.
- (2) The top plate can be removed after loosening the two screws which secure it to the brackets on the reader.
- (3) The tape guide plate can be removed after loosening the two screws which secure to the brackets on the reader. Hold the tape lid latch to the right while lifting the tape guide plate from the reader.

2.07 Two unit cover plate assemblies are removed from the reader in the following manner:

- (1) The cover plate is removed by lifting its left side and carefully pulling it off the left side of the reader.
- (2) The guide plate assembly can be removed after loosening the four screws which secure it to brackets on the reader.

Rear Plate Assembly

2.08 To remove the rear plate assembly from the tape reader, proceed as follows:

- (1) Remove the stop-start contact assembly bracket by removing the two screws, the two lockwashers, and the two flat washers that secure the bracket to the rear plate.
- (2) Unhook the four springs from the spring bracket.
- (3) Remove the armature spring.
- (4) Remove the three nuts and lockwashers that secure the rear plate to the three posts.
- (5) Remove the screw and lockwasher that secure the retaining ring to the rear plate.
- (6) Remove the screw that secures the rear plate to the post.
- (7) Remove the nut and lockwasher that secure the sensing bail shaft to the rear plate.
- (8) Remove the drive gear from the main shaft.
- (9) Remove the rear plate assembly from the tape reader.

Start-Stop Contact Assembly

2.09 To remove the start-stop contact assembly from the tape reader, proceed as follows:

- (1) Remove start-stop contact assembly from rear plate as outlined in 2.08(1).
- (2) Unsolder and disconnect the leads from the start-stop contact assembly. Remove the contact assembly.

Tape-Out Contact Assembly

2.10 To remove tape-out contact assembly from tape reader, proceed as follows:

- (1) Unsolder and remove the cable assembly leads from the tape-out contact assembly.
- (2) Remove the two screws, lockwashers, and flat washers from the assembly mounting bracket.

- (3) Remove the tape-out contact assembly with its mounting bracket from the tape reader.

Operating Magnet Assembly

2.11 To remove the operating magnet assembly from the tape reader, proceed as follows:

- (1) Unsolder and disconnect the two color-coded leads (white-black-yellow and black-yellow) from the magnet terminals.
- (2) Disconnect the armature spring from the armature extension.
- (3) Remove the two screws, lockwashers, and flat washers that secure the magnet assembly mounting bracket to the rear plate.
- (4) Remove the magnet assembly with its bracket from the tape reader.

Code Contact Assembly

2.12 To remove the code contact assembly from the tape reader, proceed as follows:

- (1) Remove the two screws, lockwashers, and flat washers that secure the assembly to the post.
- (2) The assembly can now be moved approximately 2 inches outside the tape reader.
- (3) Unsolder and disconnect the cable assembly leads from the code-contact assembly terminals.

- (4) Remove the code-contact assembly from the tape reader.

Main Shaft Assembly

2.13 To remove the driven gear from the main shaft, proceed as follows:

- (1) Remove the main-shaft nut and lockwasher.
- (2) Remove the screw, two lockwashers, two flat washers, and nut that fasten the driven gear to the main shaft. (This screw passes through the main shaft at the driven-gear end.)

2.14 To remove the main shaft assembly from the tape reader, proceed as follows:

- (1) Remove the driven gear, as outlined in 2.13.
- (2) Hold the flywheel firmly and remove the nut, lockwasher, and flat washer.
- (3) Remove the screw, two flat washers, lockwasher, and nut. (This screw passes through the main shaft at the flywheel shoulder.)
- (4) Remove the screw, lockwasher, and clamp from the front plate. (This screw threads into a tapped hole in the plate which fits against the inside edge of the front plate.)
- (5) Remove the bearing from the flywheel end of the main shaft.
- (6) Carefully remove the main shaft from the rear of the tape reader.