

**DATA SET 103E-TYPE
DATA STATION
USING KS-20093 CABINETS
MAINTENANCE**

1. GENERAL

1.01 This section describes the maintenance procedures to be performed for a Data Set 103E-type data station (103E-type Data Station) which use KS-20093 cabinets.

1.02 This section is reissued to include information on the 103E-type Data Station when it has been modified to provide answer-only service.

1.03 Routine maintenance is not required on 103E-type Data Stations.

1.04 Data Sets 103E-type suspected of being in trouble should be tested as described in the section entitled Data Set 103E-Type Data Station Using KS-20093 Cabinets—Test Procedures (591-025-501).

1.05 If the data set meets the test requirements:

- (a) Verify with the customer that the terminal equipment and associated cords test satisfactorily.
- (b) Check for connector and cord defects in the data station.
- (c) Check for intermittent trouble in station wiring.

1.06 Data sets not meeting test requirements should be replaced in order to restore customer service as quickly as possible.

2. REPLACEMENT PROCEDURES

2.01 Replacement of data set:



Before removing defective data set, remove power to data set by removing fuses +18 volts dc and -18 volts dc associated with data set in question. These fuses are located on the 1A-type Data Mounting. The F1 and F2 fuses on the 1A1 Data Mounting unit supply +18V and -18V for data sets number 1 and 2.

(a) Three screws secure data set to the 2A1 Data Mounting (Fig. 1).

(b) Make sure that the replacing data set is equipped with the proper options. When the data set is used in answer-only service, the options required differ from those of an unmodified station. For information on option requirements, refer to the section entitled Data Set 103E-Type Data Station Using KS-20093-L1 Cabinets—Installation and Connections (591-025-201).

(c) After ensuring that proper options are installed in the new data set, replace power fuses and perform data set tests as described in the section entitled Data Set 103E-Type Data Station Using KS-20093 Cabinets—Test Procedures (591-025-501).

2.02 The following components on the 1A1 Data Mounting may be replaced if defective:

- 31A Power Unit
- KS-19175-L1 Interrupter
- AR256 Circuit Pack

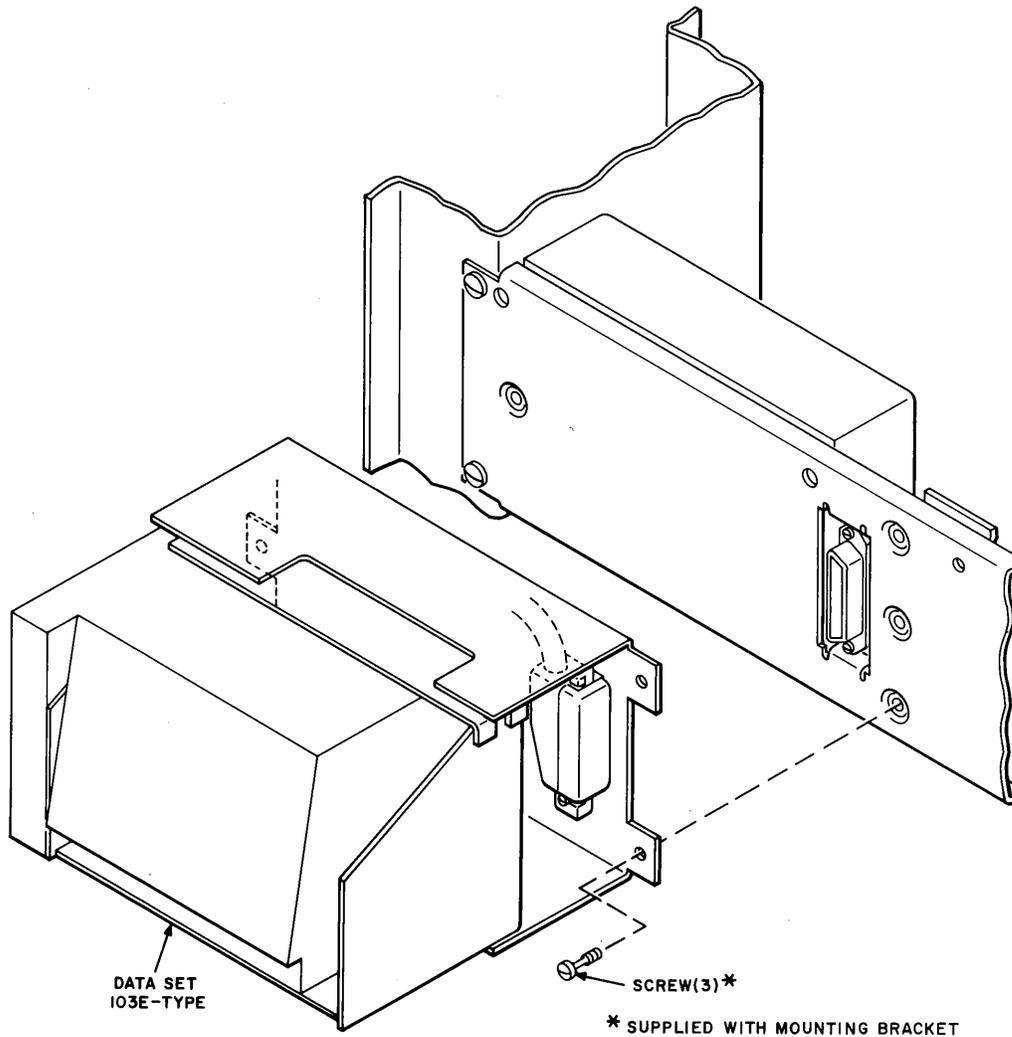


Fig. 1—Detail for Mounting Data Set 103E-Type

2.03 Replacing 31A power unit:

THINK Before replacing 31A power unit, remove power to unit by unplugging the 117 volts ac input power cord from KS-20129 power strip.

- (1) Disconnect the 117 volts ac input power cord (P-40J328) from 31A power unit.
- (2) Unplug output power plug from 1A1 Data Mounting.
- (3) Remove mounting screws (eight) as shown in Fig. 2.

- (4) Install new 31A power unit, reversing Steps 1 through 3.

2.04 Replacing KS-19175-L1 interrupter:

- (a) Remove captive mounting screw and unplug interrupter from 1A1 Data Mounting.
- (b) Plug new interrupter into 1A1 Data Mounting and replace captive mounting screw.

Note: ♦When answer-only service is provided, the new interrupter unit must be modified as indicated in Part 6 of the section entitled Data Set 103E-Type Data Station Using

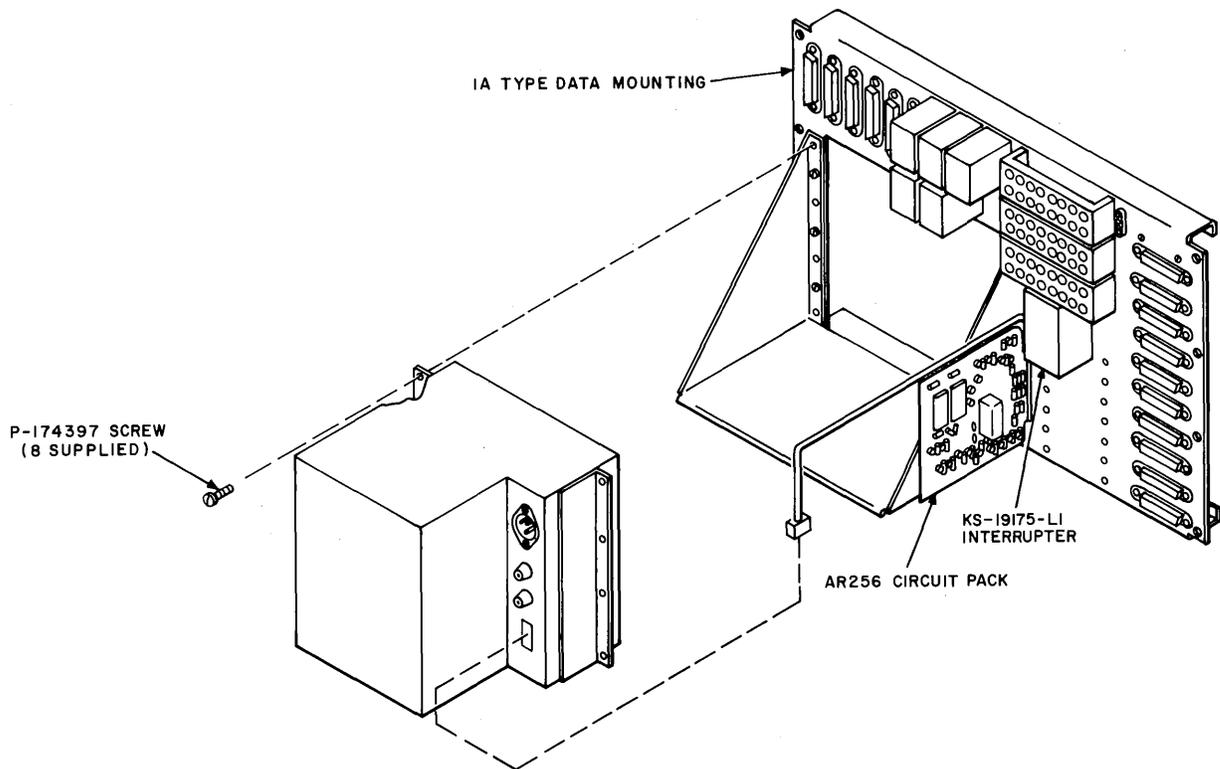


Fig. 2—Detail for Mounting 31A Power Unit

KS-20093-L1 Cabinets—Installation and Connections (591-025-201).◆

2.05 Replacing AR256 circuit pack:



Before replacing AR256, remove fuses FC +18 and FC -18 from 1A1 Data Mounting to prevent damage to AR256 circuit pack.

- (a) Remove the two captive mounting screws.
- (b) Carefully remove AR256 circuit pack from mounting.
- (c) Plug in new AR256 circuit pack.
- (d) Reinstall captive mounting screws.
- (e) Replace fuses FC +18 and FC -18.

2.06 If trouble is encountered with relays or other components not covered in 2.02 that comprise the 1A1 Data Mounting, the entire 1A1 Data Mounting should be replaced. Refer to the

section entitled Data Set 103E-Type Data Station Using KS-20093 Cabinets—Installation and Connections (591-025-201) for the procedures.

Note: ◆When answer-only service is provided, the new interrupter unit must be modified as indicated in Part 6 of the section entitled Data Set 103E-Type Data Station Using KS-20093-L1 Cabinets—Installation and Connections (591-025-201).◆

2.07 Maintenance of 1A2 Data Mounting is limited to replacement of the 31A power unit, which can be replaced using the procedure outlined in 2.03, or of the complete mounting. For replacement of the complete 1A2 Data Mounting, refer to the section entitled Data Set 103E-Type Data Station Using KS-20093 Cabinets—Installation and Connections (591-025-201).

2.08 Maintenance of the 2A1 Data Mounting is limited to replacement of DG1 circuit pack or of the complete mounting.



Disconnect power to unit before replacing complete mounting or DG1 circuit pack by removing proper fuses per Table A.

TABLE A

FUSE DESIGNATION		CONNECTOR	2A1 NUMBER	
1A1	1A2			
F1	F1	J7	1	11
F2	F2			
F3	F3	J8	2	12
F4	F4			
F5	F5	J9	3	13
F6	F6			
F7	F7	J10	4	14
F8	F8			
F9	F9	J11	5	15
F10	F10			
F11	F11	J12	6	16
F12	F12			
F13	F13	J13	7	17
F14	F14			
F15	F15	J14	8	18
F16	F16			
F17	F17	J15	9	19
F18	F18			
F19	F19	J16	10	20
F20	F20			

Example: To remove 2A1 number 16 remove the +18V and -18V fuses designated F11 and F12, located on 1A2 Data Mounting.

- (a) To replace DG1 circuit pack:
- (1) Remove the two captive mounting screws.

- (2) Carefully unplug DG1 circuit pack.
- (3) Plug in new DG1 circuit pack.
- (4) Replace the two captive screws.

(b) To replace complete 2A1 Data Mounting, refer to the section entitled Data Set 103E-Type Data Station Using KS-20093 Cabinets—Installation and Connections (591-025-201).

(c) When complete 2A1 Data Mounting is replaced, make sure that required options are installed in the replacing unit.

2.09 Field maintenance of Data Auxiliary Set 804J consists of the following:

- (a) Replacement of defective lamps

Note: Select field and monitor lamps are J-2 type, control and attendant line lamps are 53A type, and action lamps are 51A type.

- (b) Replacement of defective ringer—C4A ringer

- (c) Replacement of defective buzzer—7E-49 buzzer

- (d) Replacement of defective cord reel—3B cord reel

- (e) Replacement of defective handset—G3K-58

- (f) Replacement of defective dial

- (1) Rotary dial—9C-58

- (2) TOUCH-TONE® dial—35A3A.

Note: When answer-only service is provided, refer to the section entitled Data Set 103E-Type Using KS-20093-L1 Cabinets—Installation and Connections (591-025-201) for information on the modifications that have been made to the DAS 804J-type.