INSTRUCTIONS FOR INSTALLING 403400 AND 403399 MODIFICATION KITS TO PROVIDE ATTENDANT SELECTABLE FEATURES TO 40C204 CONTROLLER

1. GENERAL

1.01 The 403400 modification kit consists of necessary parts to provide a means for an attendant to switch between two sets of interface options for 40C204 controller. By means of a single-toggle switch, the attendant can select either set of interface options affecting reverse channel, full/half-duplex, parity or 8th bit mark/space, one/two stop bit, EIA receive data/current loop, 103-/202-type modem, and baud rate. The two interface modes are programmed on miniature switch packages by craft or maintenance personnel. A second attendant accessible switch is provided in the modification kit to enable independent switching from full to half-duplex operation.

1.02 The 403399 modification kit consists of necessary parts to allow the attendant to utilize features of 403400 modification kit when mounted in a Model 40 pedestal without opening the pedestal door. When the controller is mounted in a pedestal, the attendant switches in the 403400 modification kit are not readily accessible. The 403399 modification kit provides cabling and switches to make the attendant selectable features of the 403400 modification kit accessible on the front exterior of the pedestal door.

1.03 The 403400 modification kit consists of:

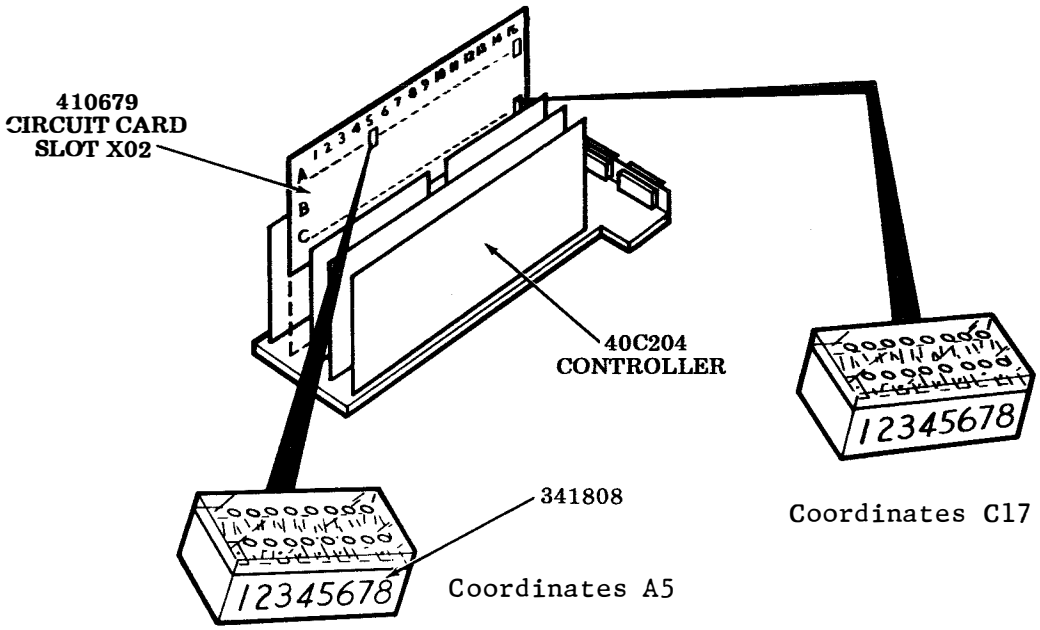
Qty	Part No.	Description
1	402186	Cable assembly
1	402187	Cable assembly
1	402188	Cover, insulating
1	410680	Circuit card

1.04 The 403399 modification kit consists of:

Qty	Part No.	Description
4	3598	Nut
8	107116 or 92527	Washer
4	151630	Screw
1	181104	Clip
1	403371	Plate, switch
1	408060	Cable w/switches

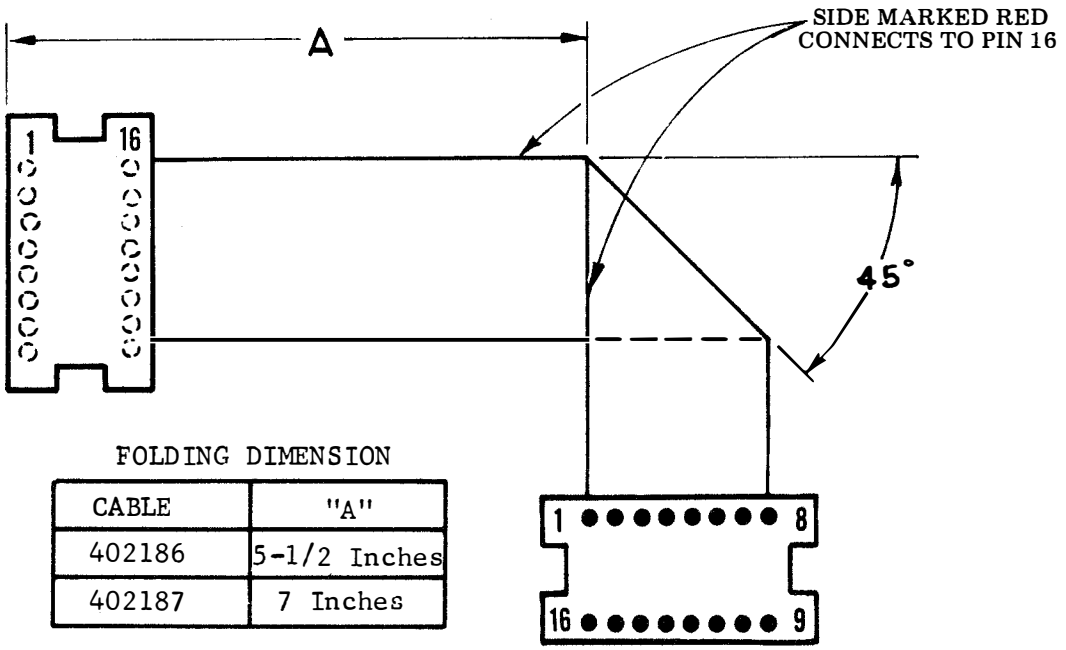
2. INSTALLATION OF THE 403400 MODIFICATION KIT

2.01 Remove 410679 circuit card from slot X02 of 40C204 controller. Pull off the two 341808 switches from the sockets, as shown.



Note: If customer anticipates reverting back to original application of terminal, switches should be carefully removed and retained.

2.02 Form 402186 and 402187 cables, as shown below.

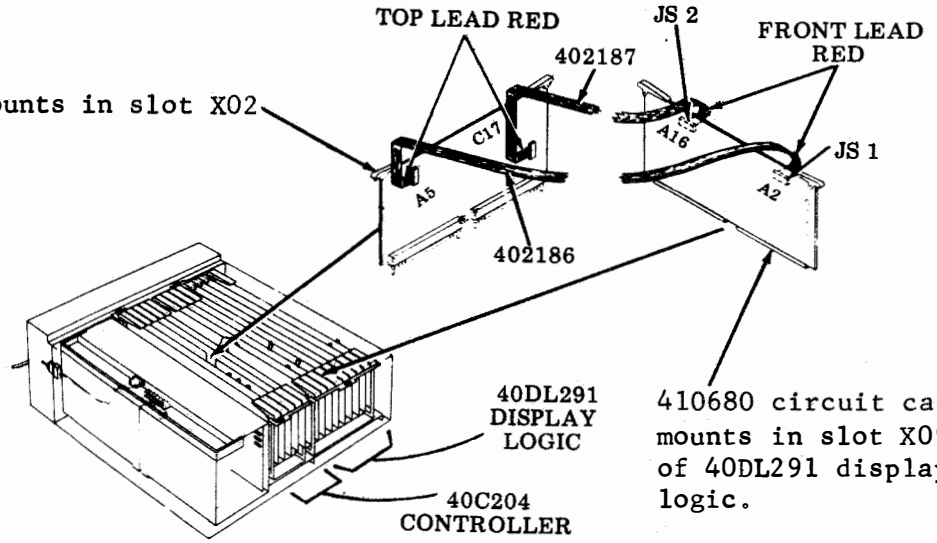


FOLDING DIMENSION

CABLE	"A"
402186	5-1/2 Inches
402187	7 Inches

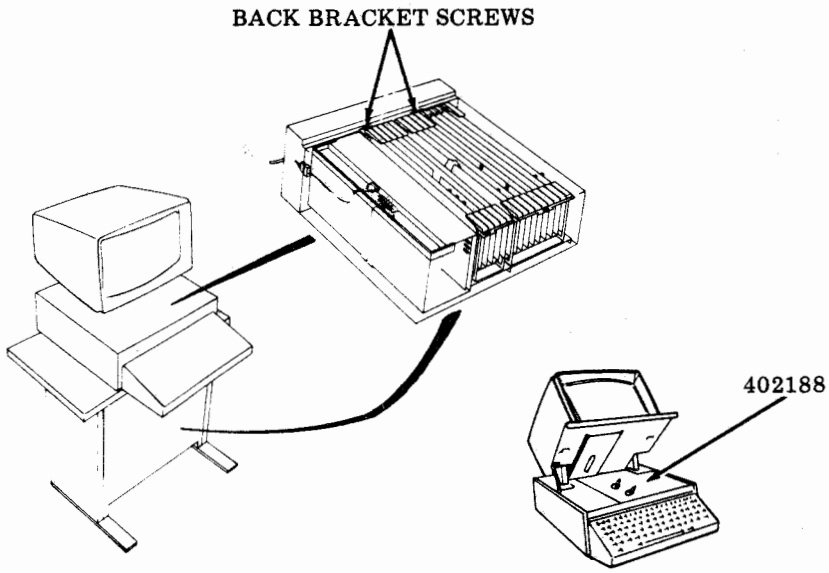
2. INSTALLATION OF THE 403400 MODIFICATION KIT (Cont)

2.03 Option the 410679 and 410680 circuit cards, see part 4. Connect the 402186 cable assembly from socket at A5 of the 401679 card to socket JS1 at A2 of the 410680 card. Then, connect the 402187 cable assembly from socket at C17 of the 401679 card to socket JS2 at A16 of the 410680 card. Observe position of red leads as shown below. Mount 410679 card into the 40C204 controller and 410680 card into the 40DL291 display logic.



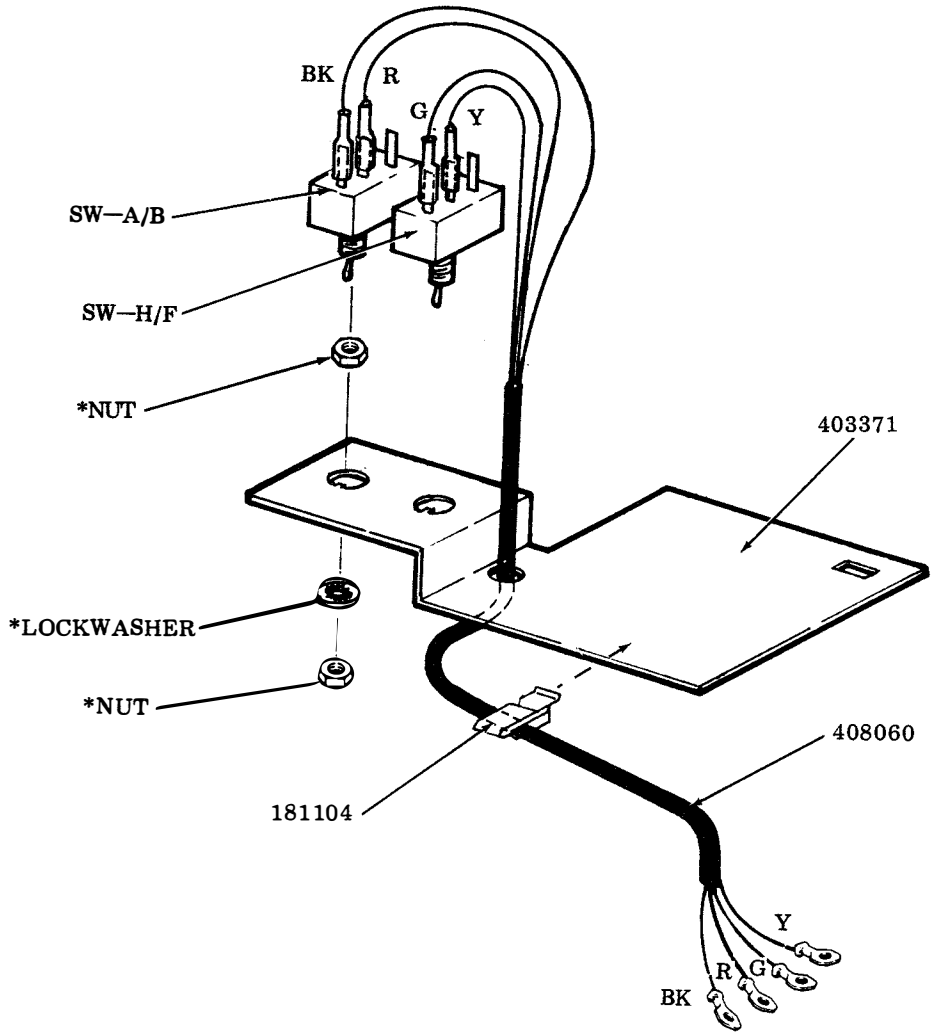
Note: Dress 402186 and 402187 cables flat and neatly over top of circuit cards.

2.04 Loosen screws (2) that secure the back bracket of the controller and display logic modules. Place slotted end of 402188 insulating cover under two loosened screws. Position cover over logic assembly (switches exposed). To align switches with the holes in the insulating cover, move the controller and logic modules front to rear as needed. Tighten screws.



3. INSTALLATION OF THE 403399 MODIFICATION KIT

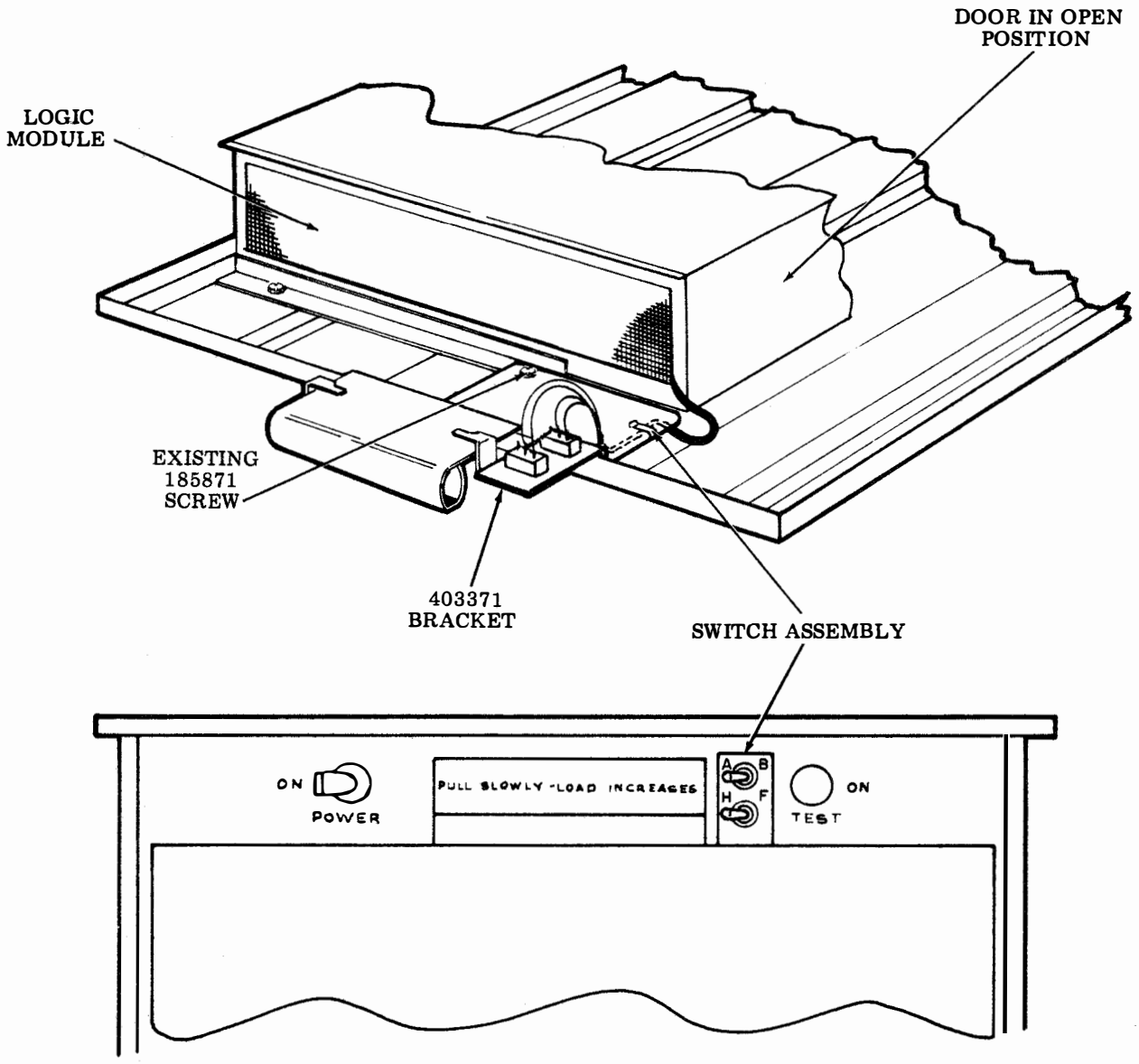
3.01 To assemble the switches (2) of the 408060 cable assembly on to the 403371 bracket, remove nut and lockwasher supplied with each switch. Remove and discard the switch keying washer (if present). Insert switches as shown. Remount lockwashers and nuts, then tighten. Apply 181104 clip over cable and secure to 403371 bracket (as shown below).



*Nuts and lockwashers supplied with switches.

3. INSTALLATION OF THE 403399 MODIFICATION KIT (Cont)

3.02 Mount 403371 bracket to back-side of cabinet pedestal door, using existing 185871 mounting screw.

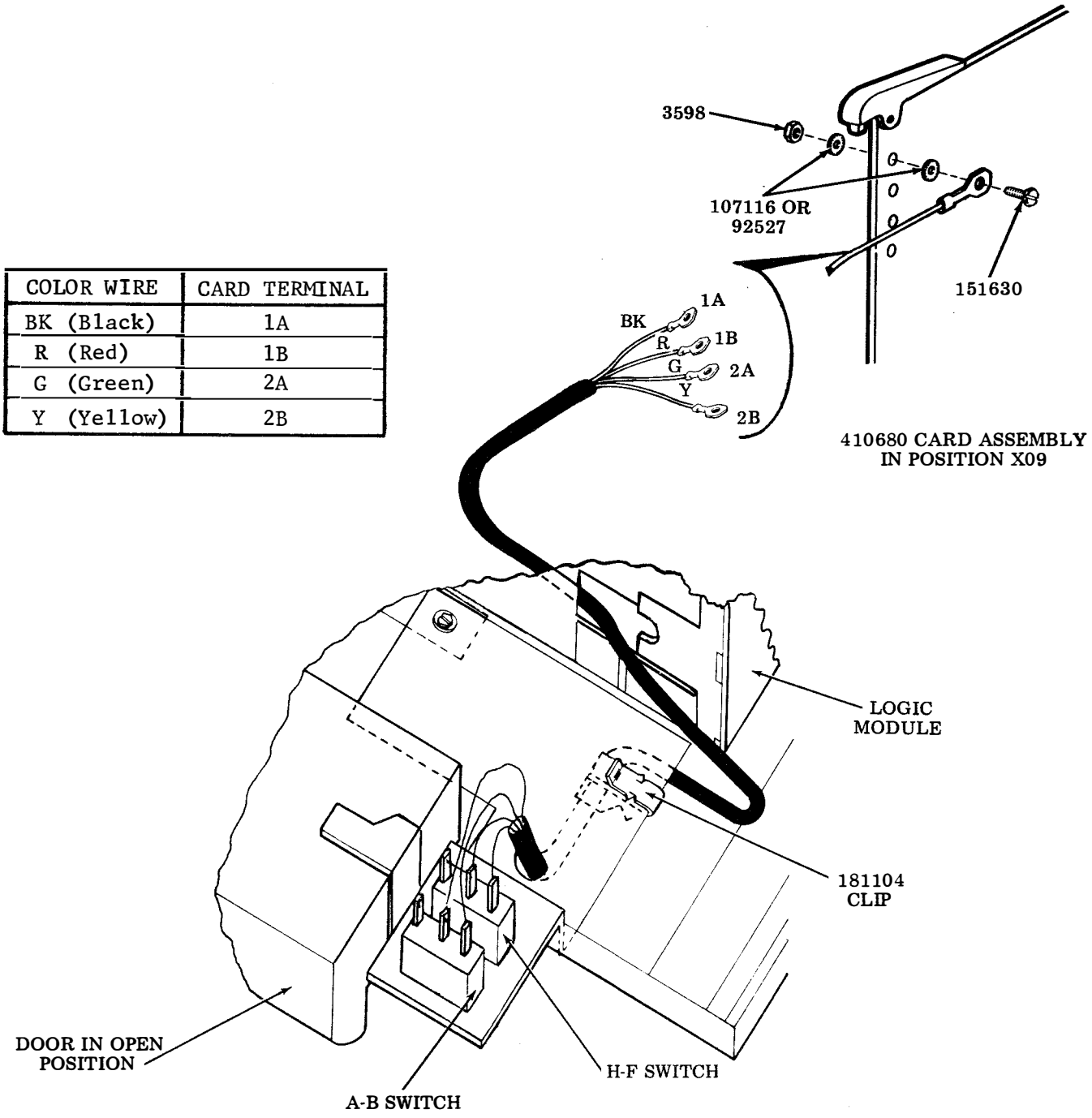


Switch Assembly Location
With Door Closed

3. INSTALLATION OF THE 403399 MODIFICATION KIT (Cont)

3.03 Route cable into controller, as shown. Attach the four ring terminals to the 410680 circuit card, using 151630 screws (4), 107116 or 92527 washers (8) and 3598 nuts.

COLOR WIRE	CARD TERMINAL
BK (Black)	1A
R (Red)	1B
G (Green)	2A
Y (Yellow)	2B

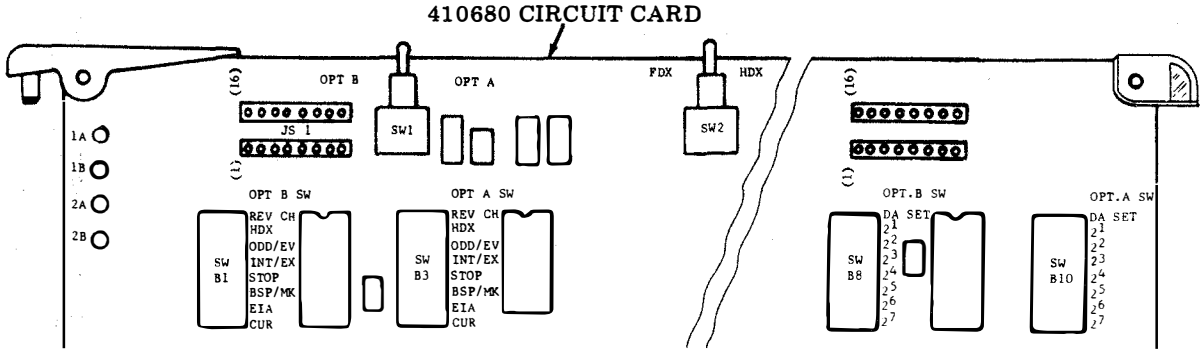


Note: Make sure terminals do not touch metal frame.

3.04 See optioning information on pages 8 and 9 to determine correct options and permanent switch settings.

4. OPTIONING

4.01 The 410679 and 410680 circuit cards must be programmed before any testing is done; either in local system application or with a Data Test Center.



Option	410680 X09 Switch Position "B" B-1								B-8								Switch Position "A" B-3								B-10							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Requires Reverse Channel to Send (202)	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ignore Reverse Channel to Send (202 or 103)	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Half-Duplex	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Full Duplex — See Note 1 on Page 8	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Send Even Parity	–	–	O	●	–	O	–	–	–	–	–	–	–	–	–	–	–	–	O	●	–	O	–	–	–	–	–	–	–	–	–	–
Send Odd Parity	–	–	●	●	–	O	–	–	–	–	–	–	–	–	–	–	–	–	●	●	–	O	–	–	–	–	–	–	–	–	–	–
Choose 1																																
Send 8th Bit as Mark	–	–	O	O	–	O	–	–	–	–	–	–	–	–	–	–	–	–	O	O	–	O	–	–	–	–	–	–	–	–	–	–
Send 8th Bit as Space	–	–	O	O	–	●	–	–	–	–	–	–	–	–	–	–	–	–	O	O	–	●	–	–	–	–	–	–	–	–	–	–
Send One Stop Bit	–	–	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–	–	–	–
Send Two Stop Bits	–	–	–	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	O	–	–	–	–	–	–	–	–	–	–	–
Enable EIA Receive Data	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–	–
Disable EIA Receive Data	–	–	–	–	–	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	O	–	–	–	–	–	–	–	–	–
Enable Receive Data From Current Loop	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–
Disable Receive Data From Current Loop	–	–	–	–	–	–	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	O	–	–	–	–	–	–	–	–
103-Type Modem or 20/60 mA Loop	–	–	–	–	–	–	–	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	O	–	–	–	–	–	–	–
202-Type Modem Interface	–	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	●	–	–	–	–	–	–	–
110 Baud	–	–	–	–	–	–	–	–	–	●	●	●	O	●	O	●	–	–	–	–	–	–	–	–	–	●	●	●	O	●	O	●
150 Baud	–	–	–	–	–	–	–	–	–	●	●	●	●	●	●	O	–	–	–	–	–	–	–	–	–	●	●	●	●	●	●	O
300 Baud	–	–	–	–	–	–	–	–	–	●	●	●	●	O	O	–	–	–	–	–	–	–	–	–	–	●	●	●	●	O	O	–
600 Baud	–	–	–	–	–	–	–	–	–	●	●	●	O	O	O	–	–	–	–	–	–	–	–	–	–	●	●	●	O	O	O	–
1200 Baud	–	–	–	–	–	–	–	–	–	●	●	O	O	O	O	–	–	–	–	–	–	–	–	–	–	●	●	O	O	O	O	–
2400 Baud	–	–	–	–	–	–	–	–	–	●	O	O	O	O	O	–	–	–	–	–	–	–	–	–	–	●	O	O	O	O	O	–
4800 Baud	–	–	–	–	–	–	–	–	–	●	O	O	O	O	O	–	–	–	–	–	–	–	–	–	–	●	O	O	O	O	O	–

● Indicates dot end of rocker switch depressed (switch closed).
O Indicates blank end of rocker switch depressed (switch open).
– Position of rocker switch does not affect option.

The following information is for reference when used with 403400 modification kit.	410679 X02 SWITCH S3 PACK A17			
	1	2	3	4
Enable Printer Interface		O		
Disable Printer Interface		●		
Clock Divide 2^0			●	

4.02 All options in position A are independent of all options in position B, therefore, any combination of options is permissible.

4.03 For detailed option limitation information, refer to 4680SD and 1408SD or BSP 579-505-351 or Manual 347 (Issue 2 or later).

4. OPTIONING (Cont)

Note 1: When the 403400 modification kit is used, the station is programmed one of two ways.

(a) When the OPT. A/OPT. B switch is used to control full and half duplex operation, the attendant selectable FDX/HDX switch must be permanently positioned to HDX.

(b) When the FDX/HDX switch is used to control full and half duplex operation, both miniature switches B1-2 and B3-2 on the 410680 card must have the dot end of each rocker switch depressed (closed position).

Note 2: When the 403399 and 403400 modification kits are used, the station is programmed as follows:

(a) When the A-B switch (on pedestal door) is to control half and full duplex operation, the HDX-FDX switch (on 410680 card) must be permanently positioned to HDX. The H-F switch (on pedestal door) operation is then ignored by the circuit logic (the switch is dead).

(b) When the H-F switch (on pedestal door) is to control half and full duplex operation, both miniature switches B1-2 and B3-2 (on 410680 card) must have the dot end of each rocker switch depressed (closed position). The FDX/HDX switch (on 410680 card) must be permanently positioned to FDX.

(c) The OPT. A/OPT. B switch (on 410680 card) must be permanently positioned to OPT. B.

5. TESTING AND TROUBLESHOOTING

5.01 All station testing is to be done in accordance with either Teletype Corporation Installation and Servicing Manual 347 (Issue 3) or FIMP Section 579-505-351. Testing must include performance tests of all optioning given in the "HOW TO OPERATE MANUAL" insert on page 9.

5.02 Follow the troubleshooting procedures and analysis given in Installation and Servicing Manual 347 (Issue 3) or FIMP Section 579-505-351. Problems associated with options for the 410679 card will be extended to include the 410680 card.

6. HOW TO OPERATE INFORMATION

NOTE TO INSTALLER -- Please mark-up the proper operating form (below) before cutting it out. Mark the baud rate 110, 150, 300, 600, 1200, 2400 or 4800 in the box. Then crossout the unneeded words. Example; a station having half duplex, 8th bit marking, 202 type modem using reverse channel to a telephone line. Would be marked; Line/~~Loop~~, Rev./~~No-Rev~~, 202/~~103~~, One/~~Two~~, ~~Odd/Even~~ 8th bit Mark/~~Space~~, and ~~Full~~/Half. Mark an X in the proper switch function box.

CUT ON DASHED LINES. PLACE IN ATTENDANT'S HOW TO OPERATE MANUAL 999-300-121.

ATTENDANT SELECTABLE FEATURE
WITH LOGIC IN TABLE TOP CABINET

- The switch marked OPT. A (LOW), OPT. B (HIGH) selects one of the two operational interfaces.

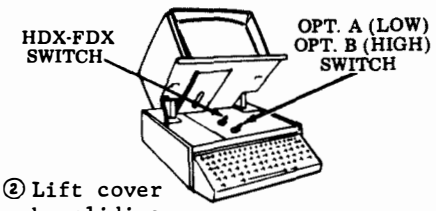
OPT. A Position	OPT. B Position
☐ Baud	☐ Baud
Line/Loop	Line/Loop
Rev./No. Rev. Chan.	Rev./No Rev. Chan.
202/103 Modem	202/103 Modem
One/Two Stop Bits	One/Two Stop Bits
Odd/Even Parity	Odd/Even Parity
Mark/Space 8th Bit	Mark/Space 8th Bit
Full/Half Duplex	Full/Half Duplex

☐ The HDX-FDX switch allows switching between half and full duplex operation.

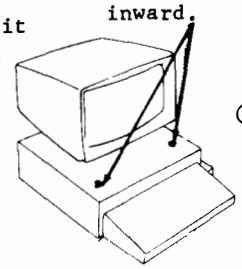
☐ The HDX-FDX switch is permanently positioned at HDX (OPT.A-OPT.B in control).

① Tilt Monitor back.

③ Set switches.



② Lift cover by sliding latches inward.



NOTE: The terms (LOW) and (HIGH) are given only to aid the operator.

④ Close and latch cover and restore Monitor.

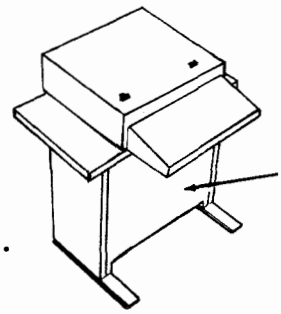
ATTENDANT SELECTABLE FEATURE
WITH LOGIC IN PEDESTAL

- The A-B switch selects one of two operational interfaces.

OPT. A Position	OPT. B Position
☐ Baud	☐ Baud
Line/Loop	Line/Loop
Rev./No Rev. Chan.	Rev./No Rev. Chan.
202/103 Modem	202/103 Modem
One/Two Stop Bits	One/Two Stop Bits
Odd/Even Parity	Odd/Even Parity
Mark/Space 8th Bit	Mark/Space 8th Bit
Full/Half Duplex	Full/Half Duplex

☐ The H-F switch allows switching between half and full duplex operation.

☐ The H-F switch is inoperative. The HDX/FDX switch (on 410680 card) is permanently positioned at HDX (A-B switch in control).



Switches are mounted adjacent to door handle.