

# MINPAK PLUS

## ACCESSORY

INSTRUCTION MANUAL D-3979

### REMOTE ADAPTER KIT MODEL NUMBER 14C220

The equipment described below should be installed only by qualified electrical maintenance personnel familiar with the construction and operation of the equipment and the hazards involved.

#### DANGER

CONTROLLER EQUIPMENT IS AT LINE VOLTAGE WHEN A-C POWER IS CONNECTED TO THE POWER UNIT IN THE MINPAK PLUS CONTROLLER. THUS, A-C POWER MUST BE REMOVED FROM THE UNIT BEFORE IT IS SAFE TO TOUCH INTERNAL PARTS OF THE CONTROLLER. PERSONAL INJURY MAY RESULT UNLESS POWER IS REMOVED.

#### DESCRIPTION

The optional Remote Operator Adapter Kit allows the locating of operator controls some distance from the Controller.

In addition to a Remote Operator Adapter Module, this Kit contains all the mounting hardware necessary to secure the Module. (Refer to Figure 1.) However, one may also need to order 2 additional options from Reliance.

Briefly, the following three steps describe what must be done:

- Select the blank Remote Operator Station Cover Faceplate if not supplied as standard. Otherwise, order Model Number 14C200.
- Order a Remote Operator Adapter Kit, Model 14C220. (This unit provides a connection point for the Remote Station.)
- Specify a Reliance Remote Operator Control Station. Connect it to the controller.

Reliance offers a variety of Remote Operator Stations that are compatible with the MinPak Plus controller. (Refer to Table 1.A).

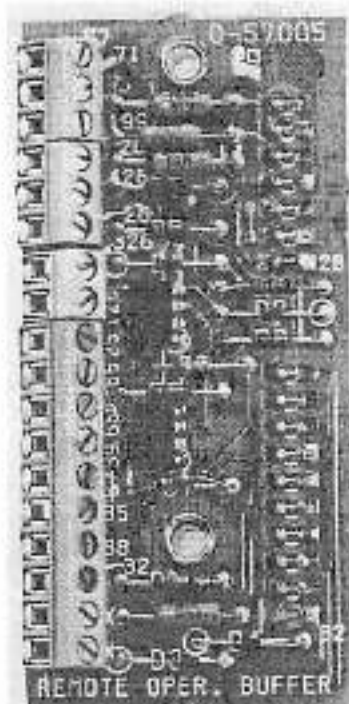
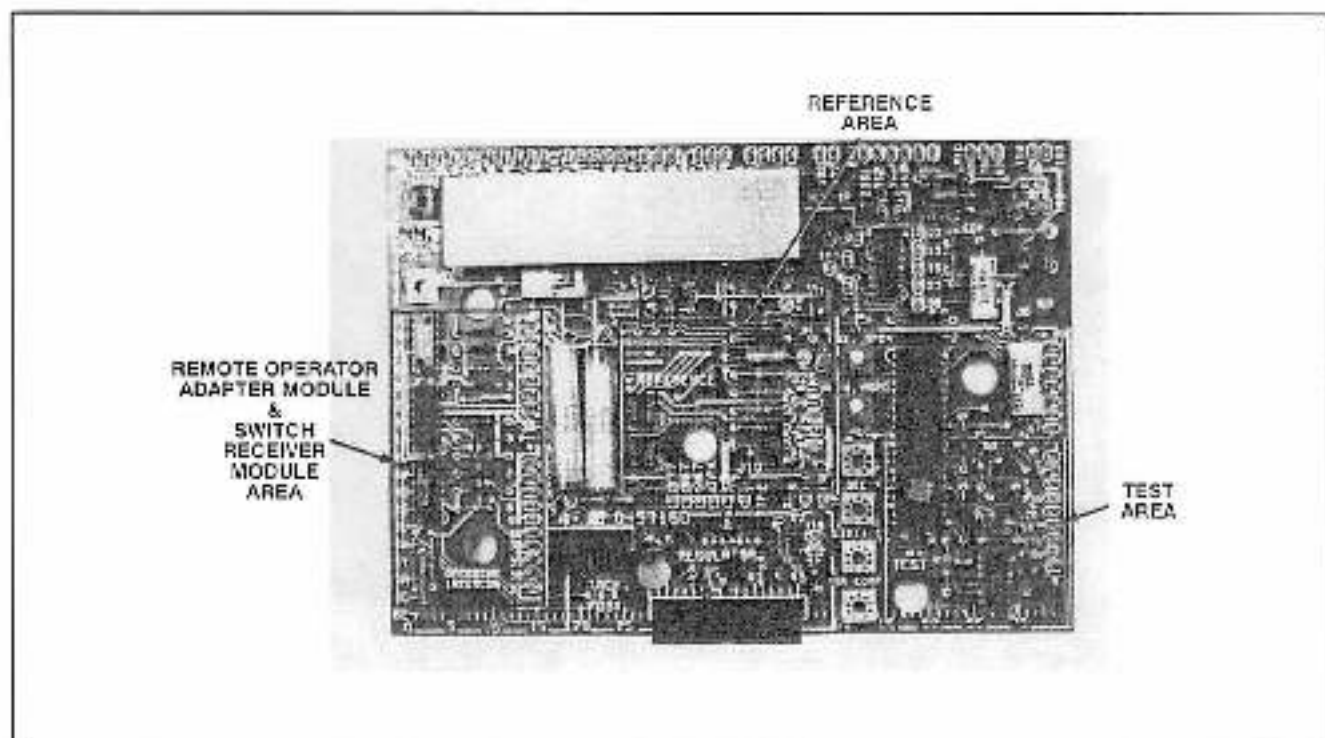


Figure 1 – Remote Operators Adapter Module  
W/Terminal Markings

**TABLE 1.A**  
**REMOTE OPERATOR CONTROL STATIONS**

When Using a MinPak Plus Controller With:	Specify Operator's Station Model	Functions Provided			
		Start/Stop Rocker Switch	Speed Setting Potentiometer	Run/Jog Selector	Forward/Reverse Selector
Basic features (standard unidirectional Station)	SC45	yes	yes	yes	no
NEMA Type 4 Station with basic features	SC18	yes	yes	yes	no
Explosion-proof Station with basic features	SC17	yes	yes	yes	no
Basic features plus armature reversing (standard reversing Station)	SC46	yes	yes	yes	yes
NEMA Type 4 Station for reversing	SC19	yes	yes	yes	yes
Explosion-proof Station for reversing	SC16	yes	yes	yes	yes



**Figure 2 — Regulator Module Kit Locations**

## INSTALLATION

**WARNING**

**BEFORE ATTEMPTING TO INSTALL THE MIN-PAK PLUS MODIFICATION KIT, DISCONNECT AND LOCK OUT ALL SOURCES OF INCOMING POWER TO THE CONTROLLER.**

1. Locate the area on the Regulator Module where the Remote Operator Adapter Module is to be mounted. Place the Module in the proper orientation: the edge with 10 holes should be aligned over the 10 pins. (Refer to Figure 2). **Carefully, slowly and gently** press the Module down on the pins until it bottoms out. Use the 2 screws to secure it.
2. Based on the specific control capability of the Remote Operator Station chosen, select the required wires specified in Table 7.B, D-3937.
3. Draw the wires into the Controller through the dedicated conduit. Then cut individual wires to lengths required for connection to the kil's terminal strip. Wire according to Figure 3.4, D-3937.

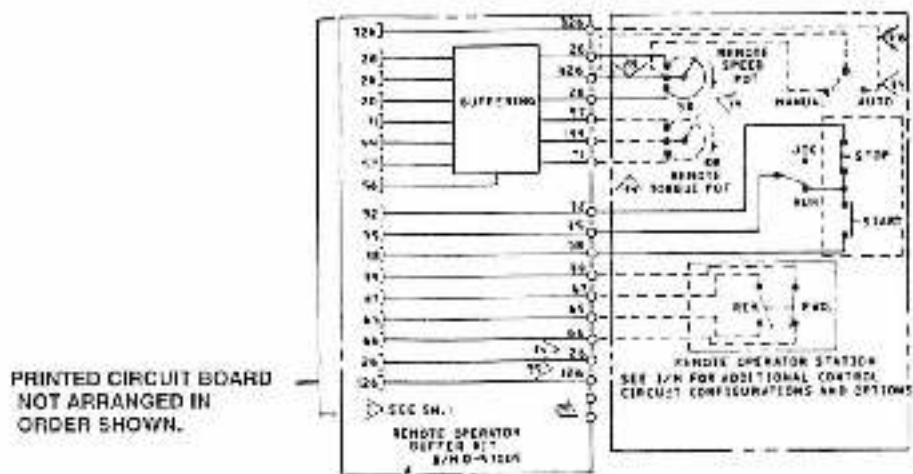
**WARNING**

EXCESSIVE LENGTHS OF BARE WIRE COULD CAUSE SHORTS AND/OR GROUNDS. STRIP MINIMAL INSULATION FROM EACH WIRE.

4. Visually inspect all wiring. Check wire placement against diagrams. Look for grounds and shorts caused by broken insulation. Make sure the conduit is grounded.
5. Attach the blank faceplate onto the cover if not already supplied. Follow installation instructions provided in Instruction Manual D-3977 MinPak Plus local operator station faceplate. Be sure to attach ground wire to cabinet door.

**DANGER**

**IT IS NECESSARY TO ATTACH THE FACTORY CONTROLLER GROUND WIRE TO THE CONTROLLER CABINET DOOR VIA THE LOCAL OPERATORS STATION FACEPLATE. PERSONAL INJURY MAY RESULT IF THIS PRACTICE IS NOT FOLLOWED.**



- 35> When remote operator buffer kit is used with switch receiver kit auto/manual switch is connected to 32E126 and 26 (instead of 32E 426 and FOT wiper) on the remote operator buffer kit terminal board. The respective pins mate with NC 232 and 32 on the switch receiver kit.
- 36> If NOT using an auto/manual switch for automatic operation only jumper terminals 426 and 32E.

**Figure 3 – Remote Operator Adapter Kit Schematic Diagram**

Reliance Electric Company / 24703 Euclid Avenue / Cleveland, Ohio 44117

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