Instructions

for the

Heath®

MAILBOX BOARD

Model HKA-232-5

HEATH COMPANY
BENTON HARBOR, MICHIGAN 49022

597-5878

INTRODUCTION

The Heath Model HKA-232-5 Mailbox Board adds a bulletin board feature to your PackKit® Data Controller. You only need to plug the Board into two existing sockets on the main circuit board and solder one wire.

INSTALLATION

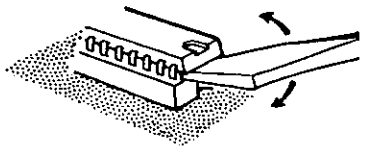
( ) Unplug the cables that are connected to the PackKit Controller, if this has not already been done.

( ) Remove the six screws that secure the cover onto your Controller. Then carefully lift the cover so you can unplug the socket on the end of the wires coming from the battery holder. Set the screws and cover aside temporarily.

Refer to Pictorial 1 while you perform the following steps.

(✓) Position your Controller as shown in the Pictorial.

(✓) Use a small-bladed screwdriver to carefully remove any integrated circuits that may be installed at U2, U3, U4, and U5. Push the tool between each IC and the socket and carefully lift the IC free. NOTE: ICs may not be installed in all four socket.



(✓) Store the removed ICs in conductive foam (or wrap them in aluminum foil) to protect them from static electricity. These ICs will not be needed again unless you wish to use the Controller without the Mailbox Board installed.

(✓) Remove the screw that secures the main circuit board to the chassis at location D.

Refer to Pictorial 2 while you perform the following steps.

(✓) Position the Mailbox Board near the Controller as shown in the Pictorial. Then crimp and solder the free end of the wire coming from the Mailbox Board to the indicated end of resistor R186 (330 Ω, orange-orange-brown).

(✓) Hold the Mailbox Board at an angle and carefully start pins 1 and 28 of Mailbox Board plugs S101 and S102 into holes 1 and 28 of main circuit board sockets U2 and U4. Then carefully rock the Board back and forth until all of the pins are seated in the sockets as far as possible.

( ) Use long-nose pliers to hold the 1/2" spacer in position between the Mailbox Board and the main circuit board. Then use a 6-32 x 7/8" screw and a #6 lockwasher to secure the Mailbox Board to the chassis at location D.

( ) Position the cover near the chassis. Then reconnect the socket on the ends of the wires coming from the battery holder to its plug on the main circuit board. NOTE: The socket and plug are polarized so you can connect it only the correct way.

( ) Use the six screws you removed earlier to reinstall the cover onto the chassis.

Refer to the "User Manual" for information about using the mailbox feature.

REPLACEMENT PARTS LIST

CAPACITORS

CIRCUIT Comp. No.	HEATH Part No.	DESCRIPTION
C101	21-786	.1 µF, 50 V axial-lead ceramic
C102	21-786	.1 µF, 50 V axial-lead ceramic
C103	21-786	.1 µF, 50 V axial-lead ceramic
C104	21-786	.1 µF, 50 V axial-lead ceramic
C105	21-786	,1 µF, 50 V axial-lead ceramic
C106	21-786	.1 µF, 50 V axial-lead ceramic

RESISTORS

R101	6-102-12	1000 Ω, 1/4-watt, 5%
R102	6-472-12	4700 Ω, 1/4-watt, 5%
R103	6-203-12	20 kΩ, 1/4-watt, 5%

TRANSISTORS – INTEGRATED CIRCUITS

CIRCUIT Comp. No.	HEATH Part No.	DESCRIPTION
Q101	230-8101	VN10LM or VN10K(N3) transistor
Q102	230-8101	VN10LM or VN10K(N3) transistor
U101	444-917	27C512 IC
U102	443-1617	62256 IC
U103	443-1303	74LS379 IC
U104	443-1264	74LS158 IC

MISCELLANEOUS

85-3719-01	Circuit board
250-1240	6-32 x 7/8" screw
254-1	#6 lockwasher
255-15	1/2" spacer
432-1380	14-pin plug strip
434-299	16-pin IC socket
434-312	28-pin IC socket