

SECTION 18

KEYSTONE MODULE

TABLE OF CONTENTS

Section	Page
18.1 Technical Description	18-1
18.2 Servicing and Alignment	18-1
18.3 Component Layout and Schematics	18-1
18.4 Parts List	18-5
18.5 Specifications	18-6

LIST OF ILLUSTRATIONS

Figure	Page
18-1 Module Block Diagram	18-1
18-2 Module Component Layout	18-2
18-3 Module Schematic	18-3

LIST OF TABLES

No tables are included in this section.

18.1 TECHNICAL DESCRIPTION

18.1.1 General Description

Correction for keystone effects are provided by the Keystone module located in the front slide-out rack.

18.2 SERVICING AND ALIGNMENT

18.2.1 Disassembly and Access

Module Location:

- front slide-out rack

Tools & Equipment Required:

- 1/4" hex head socket driver

- Remove the projector lower front and side panels as described in Section 5.
- Remove the two screws securing the front slide-out rack to the projector chassis. Slide the rack out about 4".
- Disconnect connector M15-P1 from the keystone module (item 1 below).
- Remove the two screws at the bottom of the keystone board (item 2).
- Lower the Keystone module from the slide-out rack.

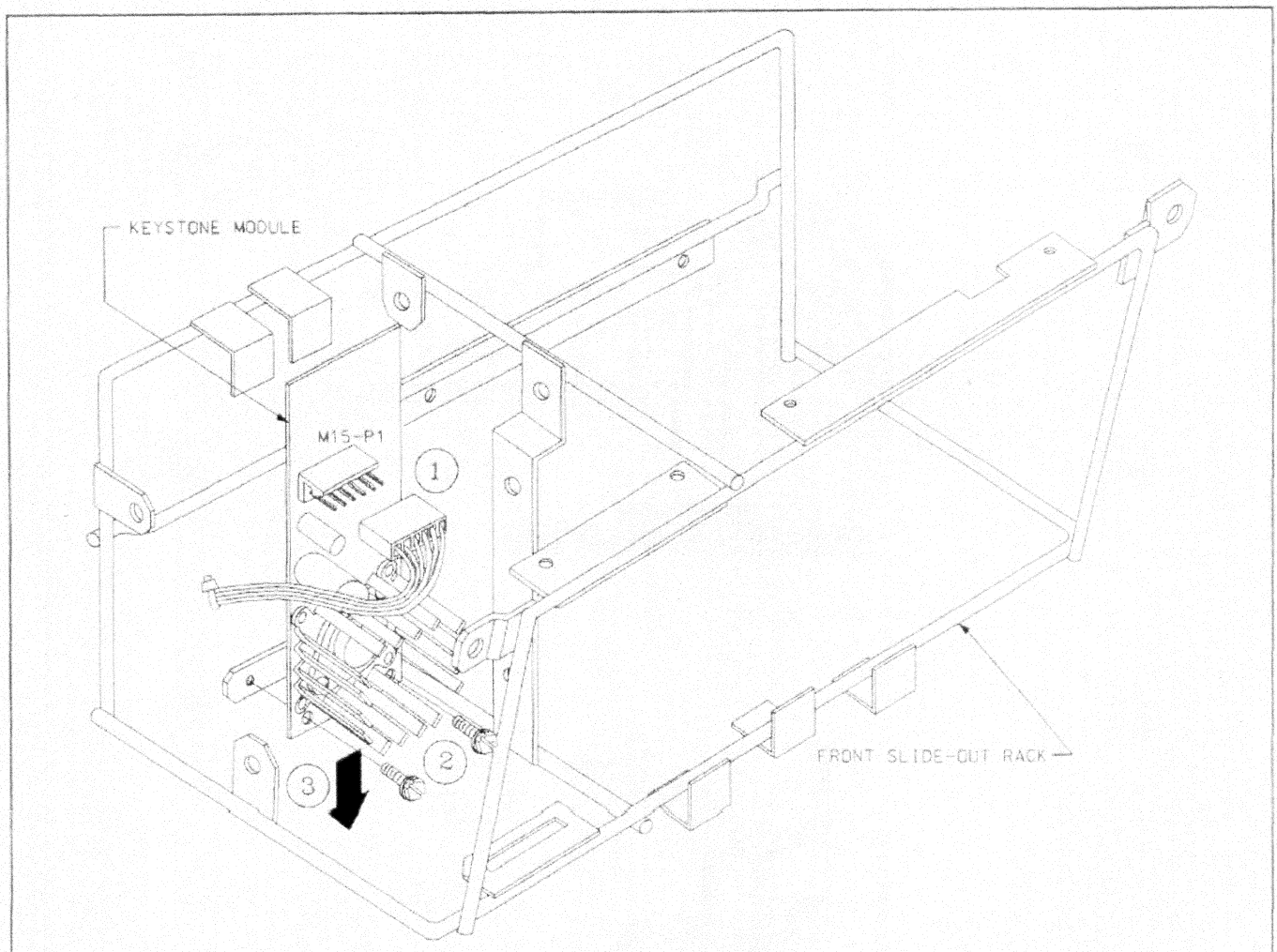


FIGURE 8-1. *Keystone Module Removal*

18.2.2 Alignment

There are no serviceable adjustments required for the Keystone module.

18.3 COMPONENT LAYOUT AND SCHEMATICS

Refer to the following pages for component layouts and schematics of the Keystone module.

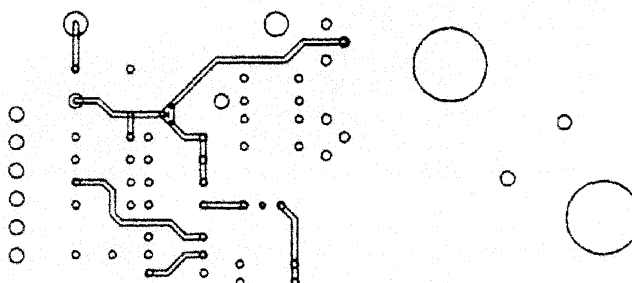
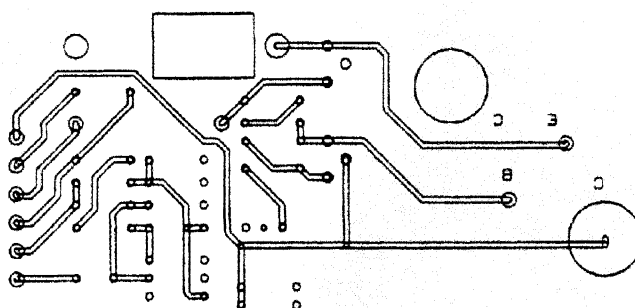
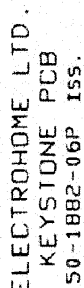



FIGURE 18-2. Keystone Module Component Layout

18.4 PARTS LIST

Item Ref.	Part No.	Description
Transistors and Diodes		
Q1	14-A00701-01P	1RF520, hex FET, 100V
Q2	14-000881-06P	2N3904, NPN, 40V, 0.2A, 0.35W
Q3	14-000873-82P	2N3906, PNP, small signal
Q4	14-A00706-01P	1RF9630, hex FET, 200V
Q5	14-000674-10P	S2530A, npn, 400V, 100W
D1-D3	14-000513-10P	BAV20, diode, 0.25mA, 150V
D4,D5	14-000513-01P	1N914, diode, 0.075A, 75V
ZD1	14-000531-37P	1N5247, zener diode, 17V, 5W, 5%
Capacitors		
C1	44-410010-08P	10 μ F, 250V
C2	84-410005-01P	10 μ F, 35V
Resistors		
R1	80-147025-11P	47K, 1/2W, 5%, metal film
R2	80-110015-11P	1K, 1/2W, 5%, metal film
 R3	42-113075-02P	3R, 5W, 5%, NI SAFETY COMPONENT
R5	80-110025-11P	10K, 1/2W, 5%, metal film
R6-R8	80-147015-11P	4.7K, 1/2W, 5%, metal film
R9	80-127025-11P	27K, 1/2W, 5%, metal film
R10	80-116035-11P	160K, 1/2W, 5%, metal film
R11	80-133015-11P	3.3K, 1/2W, 5%, metal film
R12	40-424735-01P	47K, 1/2W, 5%, metal film

18.5 SPECIFICATIONS

Connector Signal Levels:

Pin 1 analog input **BUCK OUT**
output of H. Regulator 47 to 152VDC

Pin 2 analog output **VAR DC DEFL**
BUCK OUT DC voltage drop 13VDC

Pin 3 ground **GND**

Pin 4 analog output **BUCK LOW**
= 0.01(VAR DC DEFL) $\pm 5\%$

Pin 5 **+24VDC**
voltage range 23 to 25VDC

Pin 6 analog input **KEY WFM**
keystone waveform
(from Waveform module) 8V p-p