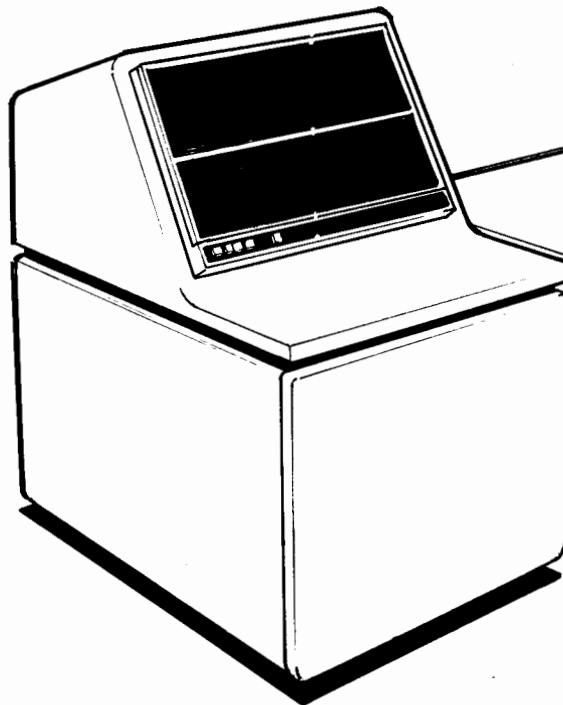


7970
LO-BOY
CABINET

MANUAL PART NO. 07970-90921
MICROFICHE NO. 07970-90922



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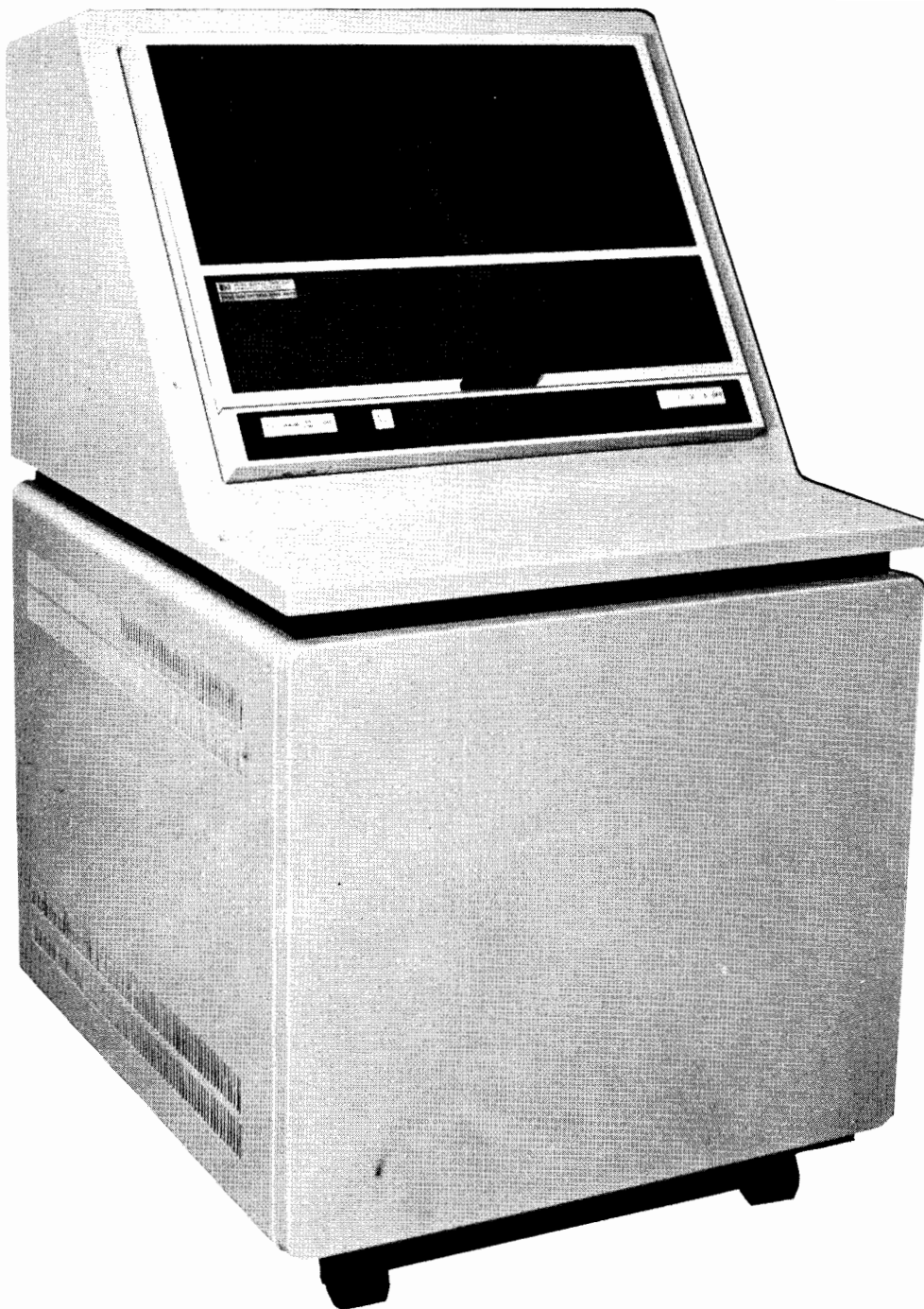


Figure 1-1 7970 Lo-Boy Cabinet

I GENERAL INFORMATION



1-1 Introduction

This manual contains general information, installation and operation instructions, maintenance, and replacement parts information for the HP 7970 Lo-Boy cabinet. This section contains the introduction, description, and cabinet specifications.

1-2 Description

The 7970 Lo-Boy Cabinet is a low profile cabinet used to mount a HP 7970B,C, or E Digital Magnetic Tape Unit. It is compatible in design to the HP 300 Systems. Two variations of the cabinet are available, the 7970 (B,C, or E) version (w/o HP-IB Interface) or the 7970E HP-IB Lo-Boy cabinet (w/HP-IB Interface).

1-3 Specifications

The specifications are listed in table 1-1.

Table 1-1 SPECIFICATIONS

LENGTH - 76.3 cm (30.1 in.)
WIDTH - 69.9 cm (27.5 in.)
HEIGHT - 118.4 cm (46.6 in.)
WEIGHT - 122.5 kg - Cabinet (270 lb)
69.9 kg - Tape Drive (143 lb)
192.4 kg - Total

II INSTALLATION AND OPERATION

2-1 INTRODUCTION

This section contains information on inspection, reshipping, installation, and operation of the HP 7970 Lo-Boy cabinet.

2-2 INSPECTION

After unpacking the unit, inspect it for damage (scratches, dents broken parts, ect.). If it is damaged or fails to operate properly after installation, immediately notify the carrier and the nearest Hewlett-Packard Sales and Service Office. Retain the shipping carton and packing material for the carrier's inspection. The Sales and Service Office will arrange for the repair or replacement of damaged units.

2-3 RESHIPPING

If the unit is to be shipped to Hewlett-Packard for service or repair, attach a tag to the cabinet identifying the owner and indicating the service or repair to be accomplished. Pack the unit in the original shipping carton, if available. If the original shipping carton is not available, a suitable container and necessary packing material can be procured from your local Hewlett-Packard Sales and Service Office.

If an original shipping carton is not used, wrap the cabinet in heavy paper and place it in a heavy (350 lb/in. test) carton or wooden container. Place adequate packing material around all sides of the cabinet. Bind the carton or box with strong tape or metal bands and mark the shipping container "FRAGILE".

2-4 INSTALLATION

Once uncrated the Lo-Boy cabinet can be rolled into place on its casters.

The tape unit is accessible through the front and/or back panels of the cabinet. Access to the tape unit's back panel is by removal of the cabinet front panel. To remove the front panel, loosen the two quarter-turn screws located at the lower corners

of the panel and lift up and out. Removal of the back panel allows access to the tape drive interior (drive electronics) for servicing. The back panel is removed by loosening the six quarter-turn screws along the sides of the panel and pulling back.

The power cord enters the cabinet through the bottom center of the back panel. Removal of the front panel allows access to the power receptacle. The power plug is secured to the tape unit with a bracket to prevent it from working loose during tape drive operation. Install the power plug by removing the two bracket screws and the bracket, insert the plug, and reinstall the bracket and screws.

Computer cables enter the cabinet through the bottom center of the back panel. To connect the standard (3-cable) computer cables, remove both the front and back panels of the cabinet. For correct connection of these cables refer to the 7970B/E Service Manual (part no. 07970-90887). The HP-IB cable is connected by removing the front panel. For correct HP-IB cable connection refer to the 7970 HP-IB Interface Programming and Service Manual (HP Part No. 07970-90919).

Prior to operating the unit the leveling feet should be screwed down to slightly lift the cabinet, securing it in place. Also, due to vent locations in the rear panel, the back of the cabinet should not be placed closer than 8 cm to the wall or any obstruction which might restrict air flow.

2-5 OPERATION

A bracket is used to hold the power cord in place during tape operation and must be removed to gain access to the line selector switch. The switch should be checked for correct voltage setting prior to operation of the of the tape unit. See paragraph 2-4 for removal of the power plug bracket.

For operating procedures for the tape unit, refer to the 7970 Series Operator's Manual (HP Part No. 07970-90885).

III MAINTENANCE

3-1 INTRODUCTION

This section contains maintenance information covering cleaning and changes made to the 7970 tape drive for operation in the Lo-Boy cabinet.

3-2 CLEANING

The cabinet should be kept clean and free of dirt and grime. To clean the cabinet use a soft bristle brush or a clean, soft cloth with a mild detergent solution. Care should be taken not to get moisture into the tape unit as this could affect its operation.

3-3 7970 LO-BOY CHANGES

The only change, electrical or mechanical, to the standard 7970 unit which is not covered in the 7970B/E Service Manual is the addition of one fan to the standard unit and two fans to the HP-IB cabinet unit. These fans are required for additional air circulation for cooling. Figure 3-1 shows the electrical connection of these fans to the transformer assembly. For all other maintenance data refer to the Diagrams and Parts Manual (part no. 07970-90886) or the Service Manual (part no. 07970-90887).

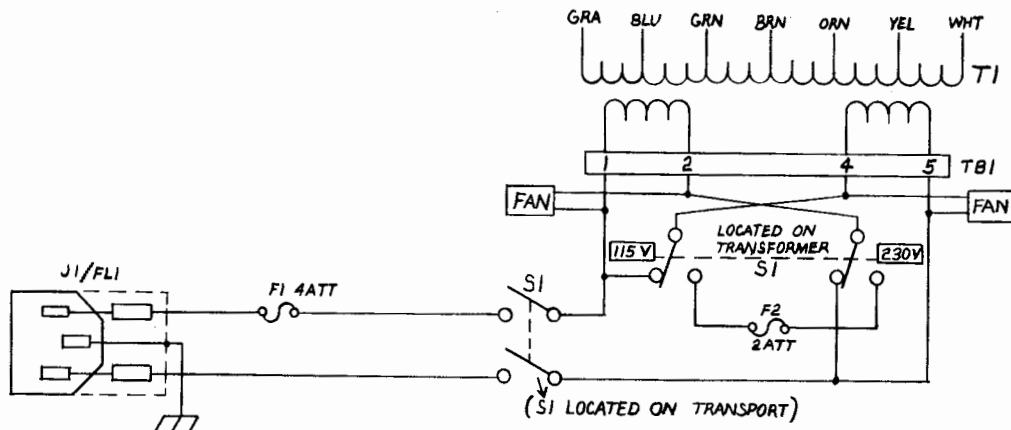


Figure 3-1 Transformer Fan Additions

IV REPLACEABLE PARTS

4-1 INTRODUCTION

This section of the manual contains illustrated parts breakdowns (IPB's), and replaceable parts lists for the 7970 Lo-Boy cabinet. Changes made since the printing of this manual are described by updating supplements supplied with this manual.

4-2 7970 PARTS VARIATIONS

The 7970 tape drive normally operates in the vertical position. The Lo-Boy cabinet turns the tape drive on its side for horizontal operation. Horizontal and Lo-Boy cabinet operation require certain parts changes and additions to the tape drive. Table 4-1 lists the standard tape drive part and the required Lo-Boy replacement part. These variations from the standard part should be noted in the 7970B/E Diagrams and Parts Manual (Part No. 07970-90886).

4-3 DESCRIPTION OF PARTS LIST

The heading for each parts list contains all assembly parts numbers (with applicable series codes) covered by that list. The first entry of the parts list indicates the main assembly on which the list is based.

The columns in the parts list furnish the following information for each part:

- a. REF. DES./INDEX NO. This column lists the reference designator or index number (callout number) which identifies each part in the appropriate logic diagram, parts location diagram, or IPB. Entries are arranged alphanumerically.
- b. DESCRIPTION - This column gives the name and a brief description of the part.
- c. PART NO. - This column lists the Hewlett-Packard part number for each part.

4-4 PARTS ORDERING PROCEDURE

To order parts from Hewlett-Packard or to obtain further information about parts, address the order or inquiry to the nearest Hewlett-Packard Sales and Service Office. When ordering from Hewlett-Packard give the following information for each part:

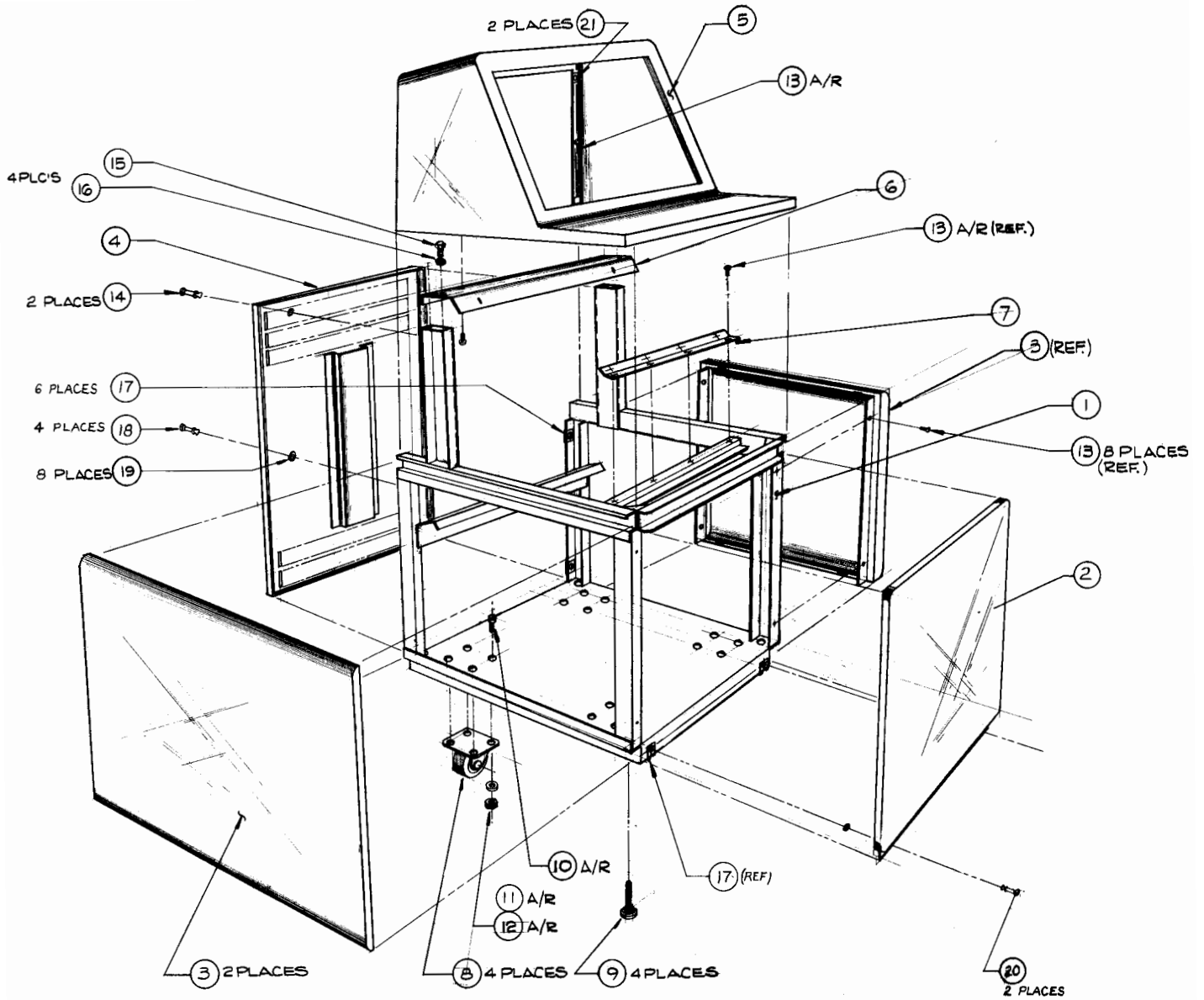
- a. Model and serial number.
- b. Hewlett-Packard part number.
- c. Description of part.
- d. Circuit reference designator or index number, if applicable.
- e. If the part is installed on a PCA, give the series code which is stamped or etched on the PCA.

4-5 PARTS

All Lo-Boy cabinet identification parts breakdowns (IPB's or Exploded Views) and parts lists are provided in the following pages.

Table 4-1 7970 Lo-Boy Change Parts

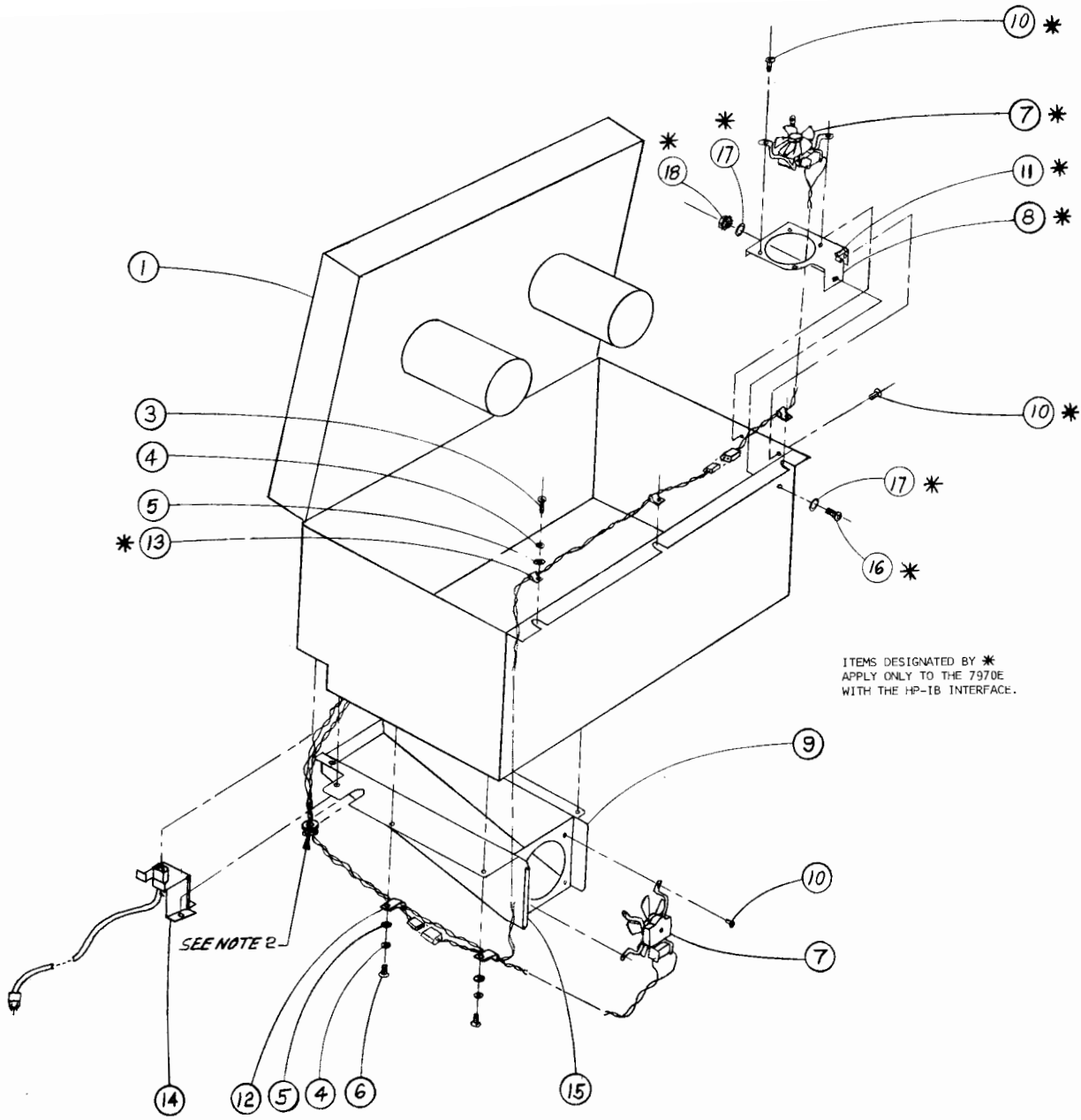
7970 Lo-Boy Replacement Part No.	Description	7970 Standart Part No.
07970-01290	COVER: Head	07970-00130
07970-01317	COVER: Switch Panel	07970-01020
07970-01319	COVER: Panel Door	07970-01186
07970-20882	FRAME: Cover Door	07970-20829
07970-20883	INSERT: Cover Door	07970-20830
07970-20884	CASTING: Main Frame	07970-20270
07970-61000	W/ENABLE Lens Assy.	07970-60960
07970-62373	HINGE Block Assy.	07970-62280
07970-62385	TRANSFORMER Assy.	07970-62351
07970-81145	CONTROL Switch Assy.	07970-62089



Lo-Boy Cabinet Assembly
 Exploded View
 4-3

LO-BOY CABINET ASSEMBLY 07970-62384
 Parts List

Ref. DES./ Index No.	Description	Part No.
1	FRAME, Assembly	07970-62383
2	COVER, Front	07970-01299
3	COVER, Side	07970-01300
4	COVER, Back	07970-01301
5	COVER, Top	07970-01302
6	BRACKET, Upper Mtg.	07970-01303
7	BRACKET, Lower Mtg.	07970-01304
8	CASTORS	
9	LEVELER, 3/8-163LG	
10	SCREW, Hex 5/16-18x62	
11	NUT, Hex 5/16-18	
12	WASHER, Lock 5/16	
13	SCREW, 10-32X.50LG	
14	STUD	
15	SCREW, 1/4-20X.50	
16	WASHER, Lock 1/4	
17	RECEPTACLE, 1/4 Turn	
18	STUD	
19	RETAINER	
20	STUD	
21	RECEPTICLE	



7970 Lo-Boy Assembly
Exploded View
4-5

7970 Lo-Boy Assembly
Parts List

Index No.	Description	Part No.
1	SUPPORT: Assy. LH	07970-81187
2	SUPPORT: Assy. RH	07970-81188
3	SCREW: 10-32x.750L	2680-0107
4	WASHER: Lock #10	2190-0467
5	WASHER: Flat #10	3050-0019
6	SCREW: 10-32	2680-0103
7	FAN	07970-62390
9	BRACKET: Lower Fan	07970-01292
10	SCREW: 6-32x.312L	2360-0115
12	CLAMP: Cable w/HP-IB Interface	1400-0294
	w/o HP-IB Interface	1400-0292
14	BRACKET: Power Cord	07970-01318
15	GROM: Channel	0400-0018
Additional parts for Cabinet Drive w/HP-IB Interface		
7	FAN	07970-62390
8	BRACKET: Upper Fan	07970-01305
10	SCREW: 6-32x.312L	2360-0115
11	GROMMET: Channel	0400-0207
13	CLAMP: Cable	1400-0292
16	SCREW: 6-32x.500L	2360-0201
17	WASHER: Flat .149	3050-0227
18	NUT: Hex 6-32	2420-0001