Section 7. Diskette Drive

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About This Section

This section contains information about the diskette drive used in the IBM 6151 System Unit.

The IBM 6151 System Unit can only have one diskette drive installed. The diskette drive is the IBM High Capacity Diskette Drive.

The fixed-disk drive and diskette drive share a fixed-disk and diskette drive adapter.

Pages in this section contain a 3-digit product code in the page number to make future updating easier.

Handling a Diskette Drive

Read and become familiar with the following diskette drive ***handling precautions***.

- Do not remove the antistatic bag from the drive until you are ready to install the drive in the system unit.
- Do not grasp the center part of the diskette drive when you are handling the drive. The squeezing action could damage the circuit board. Handle the drive by the frame only.
- Do not drop or lay the diskette drive down roughly, because that action may permanently damage the drive.

Observe the following general procedures, in addition to the specific procedures given in Section 4, to protect the drive from static discharges.

1. Lay the diskette drive (still wrapped in its antistatic bag) on a flat surface near the system unit.

2. Position yourself so you won't have to walk around while exchanging the drive. This helps prevent the generation of static electricity.

3. Touch a metal part of your system unit with one hand and the antistatic bag with the other hand. This will place your body, the drive, and the system unit at the same ground potential, thus preventing an accidental static discharge.

4. Slide the antistatic bag off of the diskette drive.

5. Handle the diskette drive by the frame only while installing or removing it. It is recommended that you use both hands to reduce the chance of dropping the drive.

6. Put the exchanged diskette drive back in the antistatic bag.

IBM High Capacity Diskette Drive

The IBM High Capacity Diskette Drive can store up to 1.2M bytes of formatted data on a Double-Sided, Cobalt-Enhanced Oxide-Coated Diskette. This drive is a single field-replaceable unit.

Specifications

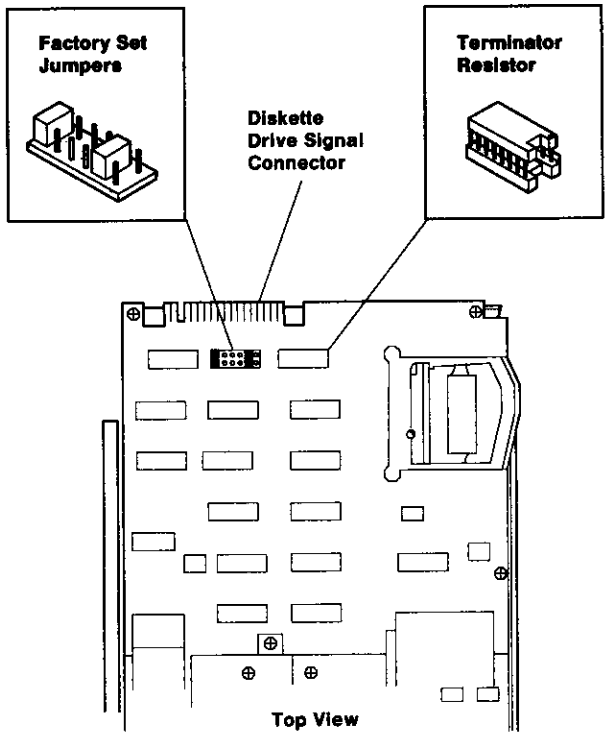
Diskette type	5.25 inch, double-sided, cobalt-enhanced oxide-coating
Total tracks	160 (80 tracks per side)
Sectors per track	15
Bytes per sector	512
Tracks per inch	96
Maximum number	1

Removal and Replacement Procedures

Use the Diskette Drive Removal and Replacement procedures in Section 4.

Terminator Resistor

Use the diagram below to identify and install the terminator resistor.



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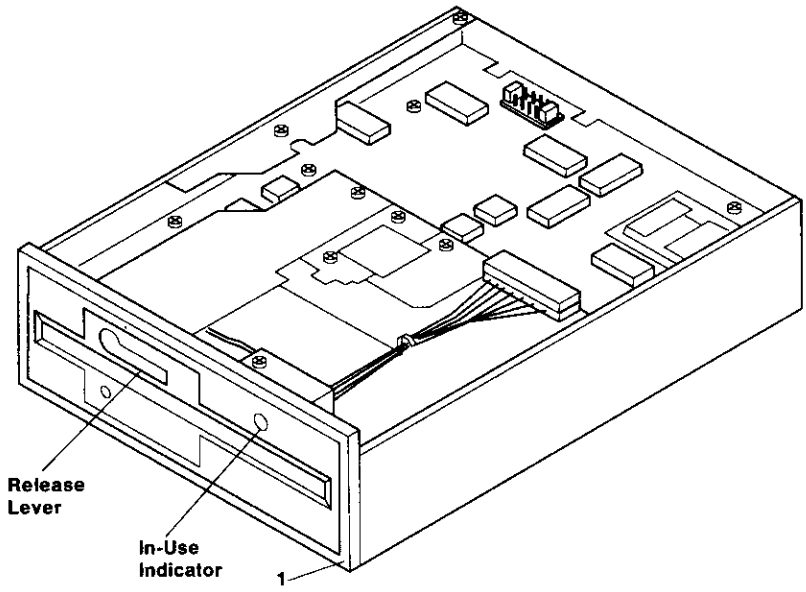
Parts Information



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Index Number	Part Number	Description
1	68X3752 61X6800	IBM High Capacity Diskette Drive Cable, fixed-disk and diskette drive

Section 8. Fixed-Disk Drives

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About This Section

This section provides information about the fixed-disk drives used in the IBM 6151 System Unit. The system unit has only one fixed-disk drive.

The fixed-disk drive and diskette drive share a fixed-disk and diskette drive adapter. If needed, see Section 9 for information about the diskette drive adapters.

Pages in this section contain a 3-digit product code in the page number to make future updating easier.

Handling a Fixed-Disk Drive

Read and become familiar with the following fixed-disk drive ***handling precautions***.

- Do not remove the antistatic bag from the drive until you are ready to install the drive in the system unit.
- Do not grasp the center part of the fixed-disk drive when you are handling the drive. The squeezing action could damage the circuit board. Handle the drive by the frame only.
- Do not drop or lay the fixed-disk drive down roughly, because that action may permanently damage the drive.

Observe the following general procedures, in addition to the specific procedures given in Section 4, to protect the drive from static discharges.

1. Lay the fixed-disk drive (still wrapped in its antistatic bag) on a flat surface near the system unit.

2. Position yourself so you won't have to walk around while exchanging the drive. This helps prevent the generation of static electricity.

3. Touch a metal part of your system unit with one hand and the antistatic bag with the other hand. This will place your body, the drive, and the system unit at the same ground potential, thus preventing an accidental static discharge.

4. Slide the antistatic bag off of the fixed-disk drive.

5. Handle the fixed-disk drive by the frame only while installing or removing it. It is recommended that you use both hands to reduce the chance of dropping the drive.

6. Put the exchanged fixed-disk drive back in the antistatic bag.

Fixed-Disk Drive Type R40

The Fixed-Disk Drive Type R40 has a storage capacity of at least 40M bytes of formatted data.

Specifications

Drive position	C
Disk size	5.25 inch fixed disk
Adapter	IBM AT Fixed-Disk and Diskette Drive Adapter

Removal Procedure

Use the Fixed-Disk Drive Removal Procedure in Section 4.

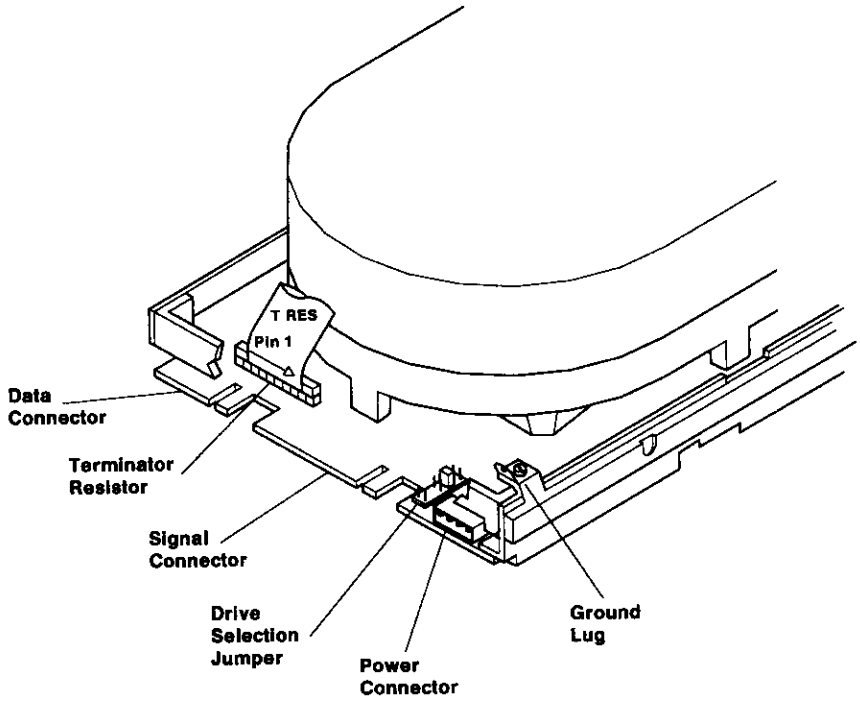
Replacement Procedure

Use the Fixed-Disk Drive Replacement Procedure in Section 4.

Terminator Resistor and Drive Selection Jumper

Use the diagram below to identify and install the terminator resistor on the type R40 drive.

Set the drive selection jumper on the next-to-last position as shown.



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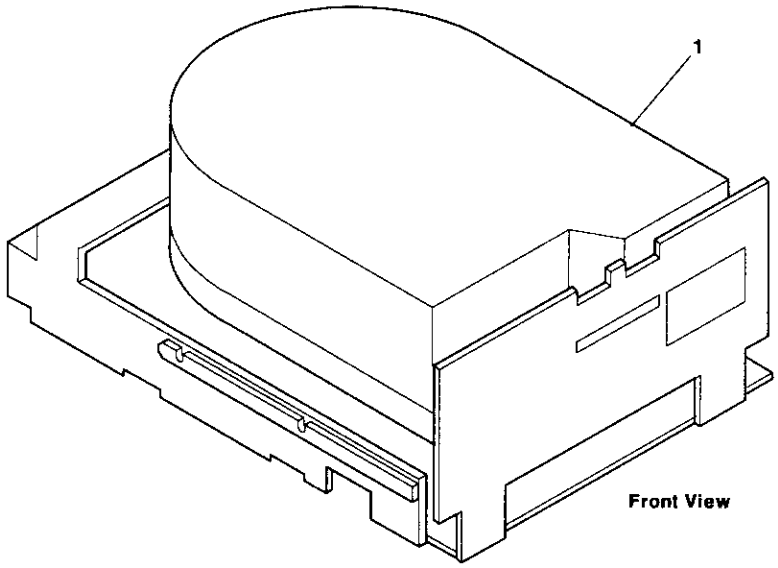
Parts Information



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Index Number	Part Number	Description
1	6299235	Fixed-disk drive type R40
	61X6800	Cable, fixed-disk and diskette drive
	6493875	Logic board and instructions

Fixed-Disk Drive Type R70

The Fixed-Disk Drive Type R70 has a storage capacity of at least 70M bytes of formatted data.

Specifications

Drive position	C
Disk size	5.25 inch fixed disk
Adapter	RT PC ESDI Magnetic Media Adapter

Removal Procedure

Use the Fixed-Disk Drive Removal Procedure in Section 4.

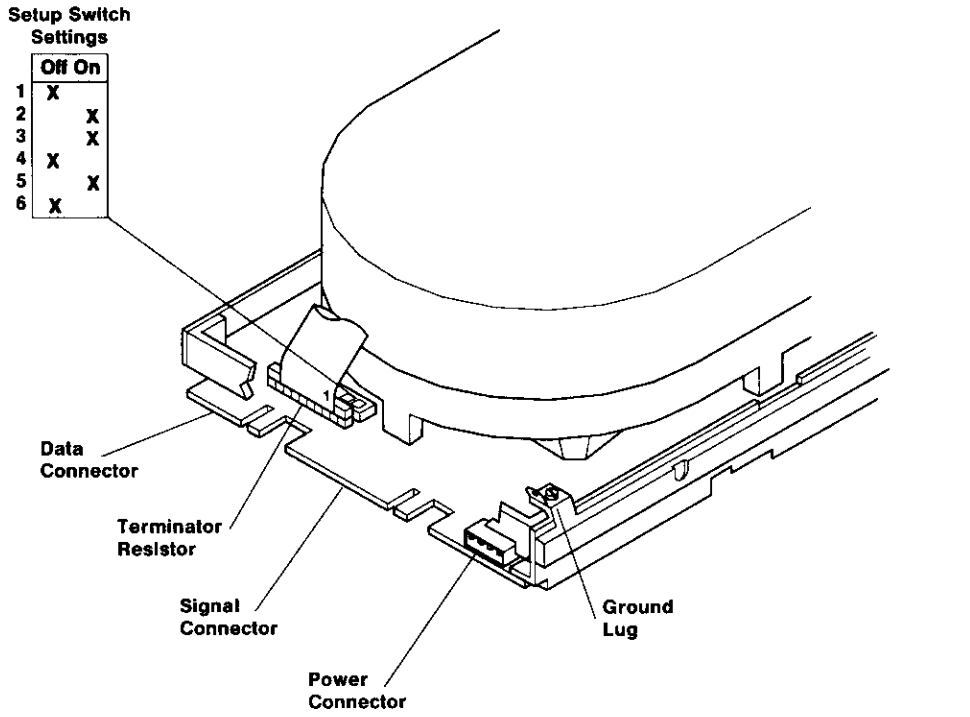
Replacement Procedure

Use the Fixed-Disk Drive Replacement Procedure in Section 4.

Terminator Resistor and Drive Setup Switches

Use the diagram below to identify and install the terminator resistor on the type R70 drive.

Set the drive setup switches as shown.



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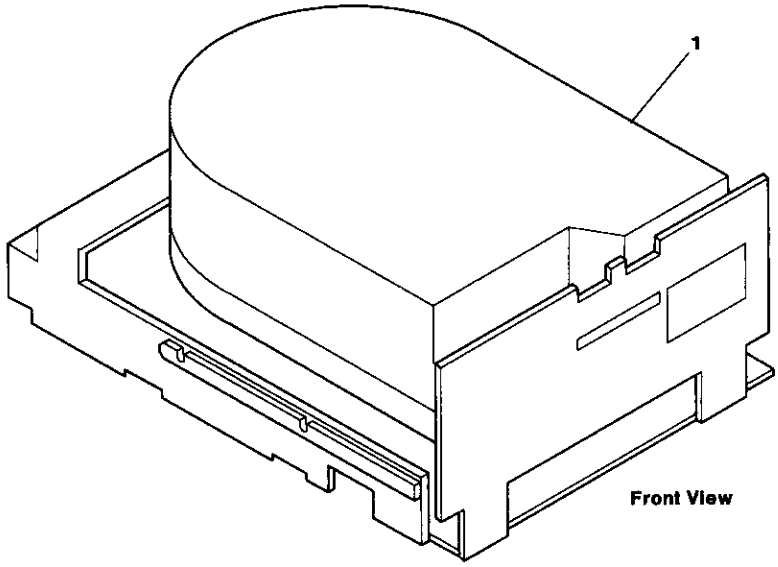
Parts Information



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Index Number	Part Number	Description
1	61X6942	Fixed-disk drive type R70
	61X6800	Cable, fixed-disk and diskette drive
	6370793	Logic board and instructions

Fixed-Disk Drive Type E70

The Fixed-Disk Drive Type E70 has a storage capacity of at least 70M bytes of formatted data.

This fixed-disk drive is physically the same as the Fixed-Disk Drive Type R70, but the formatting is different. The type R70 and E70 fixed-disk drives ***are not*** interchangeable.

Specifications

Drive position	IBM 6151 - C IBM 6156 - F, G, H
Disk size	5.25 inch fixed disk
Adapter	Extended ESDI Magnetic Media Adapter or Portable Disk Drive Adapter

Removal Procedure

Use the Fixed-Disk Drive Removal Procedure in Section 4.

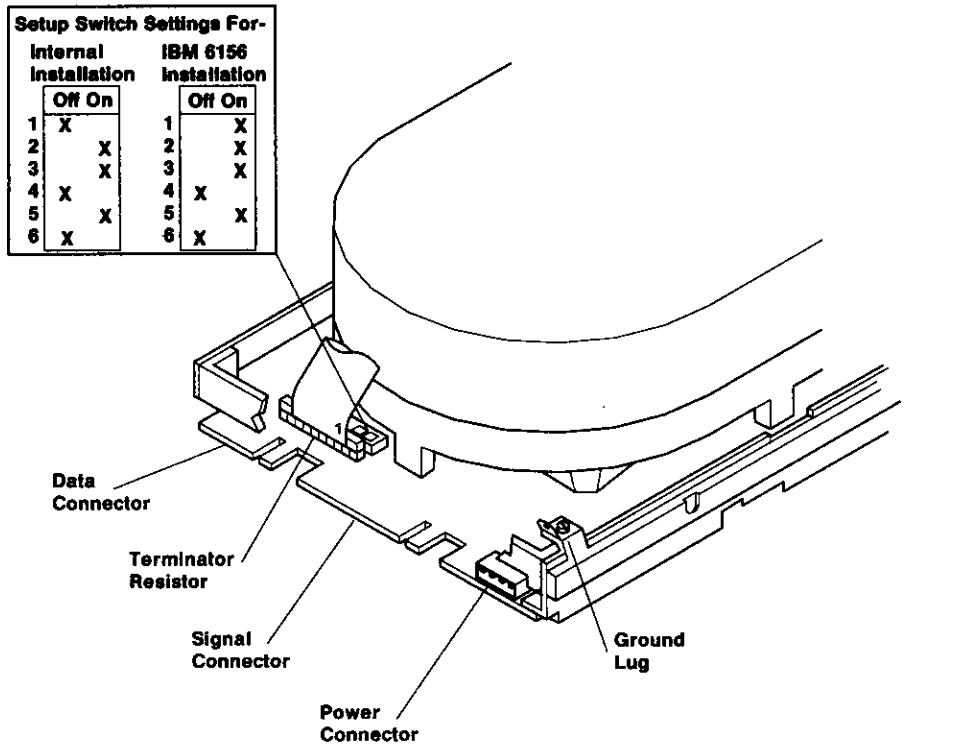
Replacement Procedure

Use the Fixed-Disk Drive Replacement Procedure in Section 4.

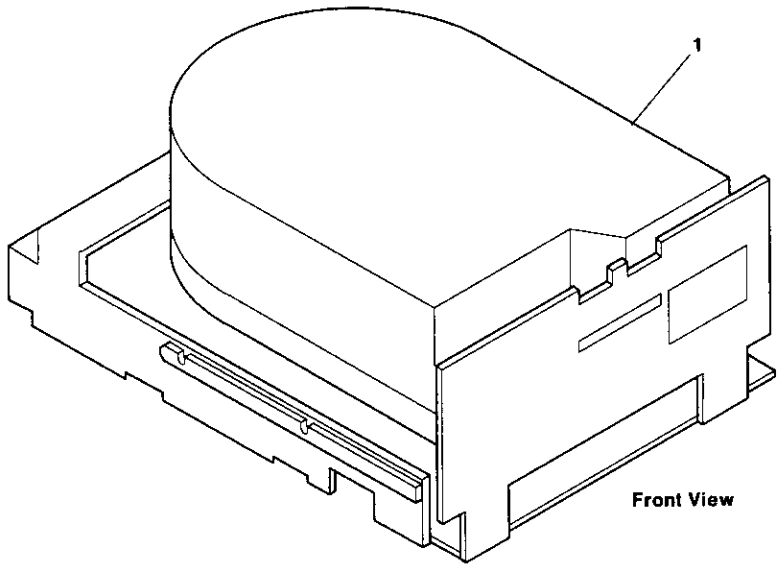
Terminator Resistor and Drive Setup Switches

Use the diagram below to identify and install the terminator resistor.

Set the drive setup switches as shown.



Parts Information



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Index Number	Part Number	Description
1	79X3989	Fixed-disk drive type E70
	61X6800	Fixed-disk and diskette drive cable
	6370793	Logic board and instructions

Fixed-Disk Drive Type E114

The Fixed-Disk Drive Type E114 has a storage capacity of at least 114M bytes of formatted data.

Specifications

Drive position	IBM 6151 - C IBM 6156 - F, G, H
Disk size	5.25 inch fixed disk
Adapter	Extended ESDI Magnetic Media Adapter or Portable Disk Drive Adapter

Removal Procedure

Use the Fixed-Disk Drive Removal Procedure in Section 4.

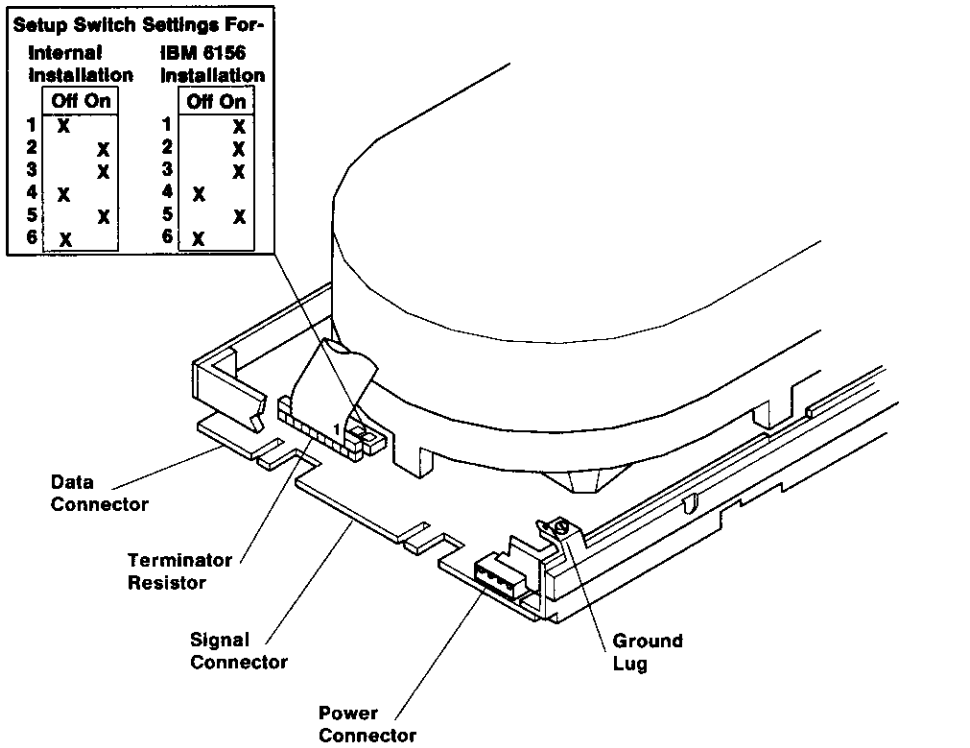
Replacement Procedure

Use the Fixed-Disk Drive Replacement Procedure in Section 4.

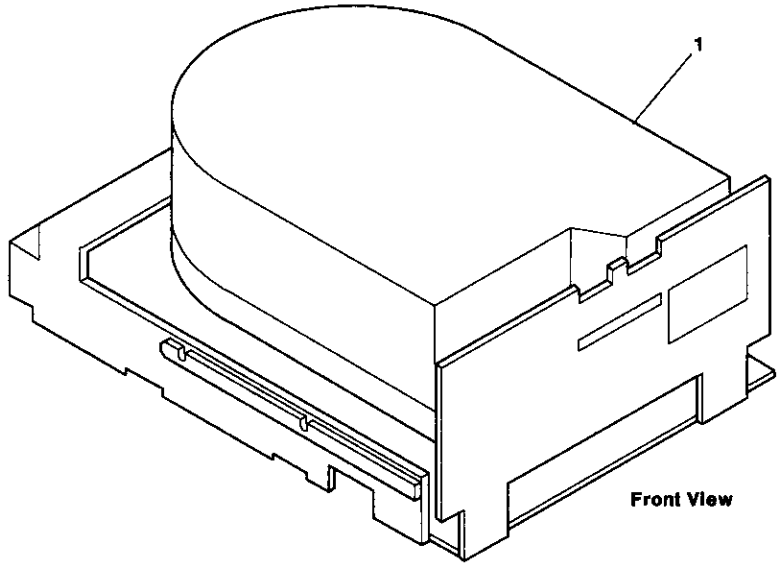
Terminator Resistor and Drive Setup Switches

Use the diagram below to identify and install the terminator resistor.

Set the drive setup switches as shown according to the unit your drive is installed in.



Parts Information



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Index Number	Part Number	Description
1	00F2273	Fixed-disk drive type E114
	61X6800	Fixed-disk and diskette drive cable
	6370951	Logic board and instructions

Fixed-Disk Drive Type E310

The Fixed-Disk Drive Type E310 has a storage capacity of at least 310M bytes of formatted data.

The fixed-disk drive in the RT PC 310MB Extended ESDI Fixed-Disk Drive option may be either a Fixed-Disk Drive Type E310 or a Fixed-Disk Drive Type H310.

There are no adjustments or individually field-replaceable parts on this drive.

Specifications

Drive positions	IBM 6151 - C IBM 6156 - F, G, H
Disk Size	5.25 inch fixed disk
Adapter	Extended ESDI Magnetic Media Adapter or Portable Disk Drive Adapter

Removal Procedure

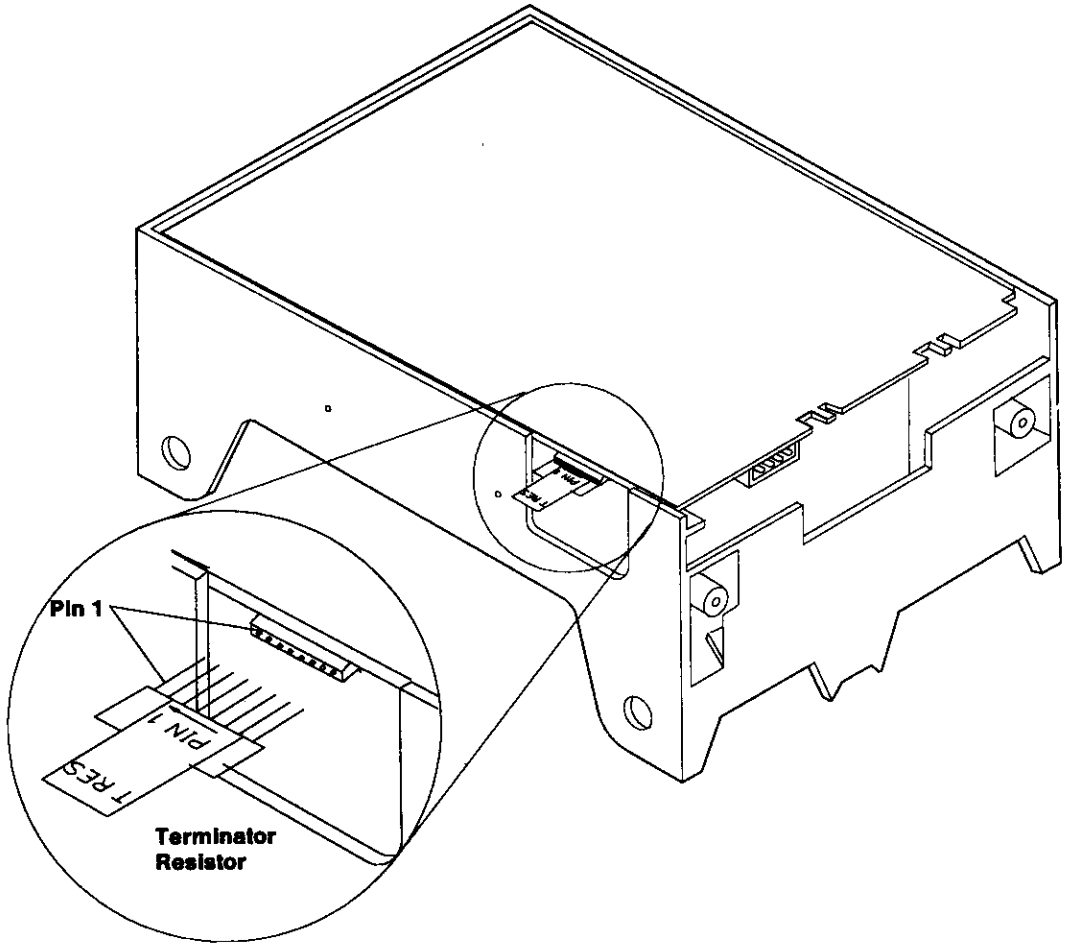
Use the Fixed-Disk Drive Removal procedure in Section 4.

Replacement Procedure

Use the Fixed-Disk Drive Replacement procedure in Section 4.

Terminator Resistor

For drive positions C, F, G, or H, install the terminator resistor if it is not already installed.



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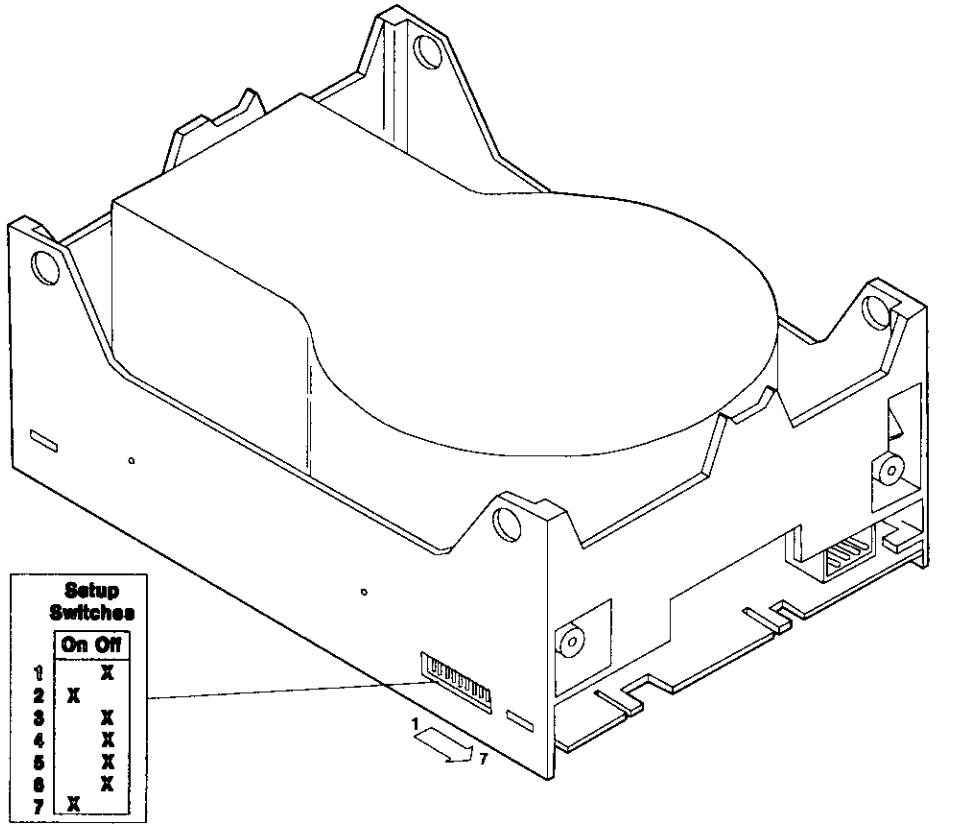
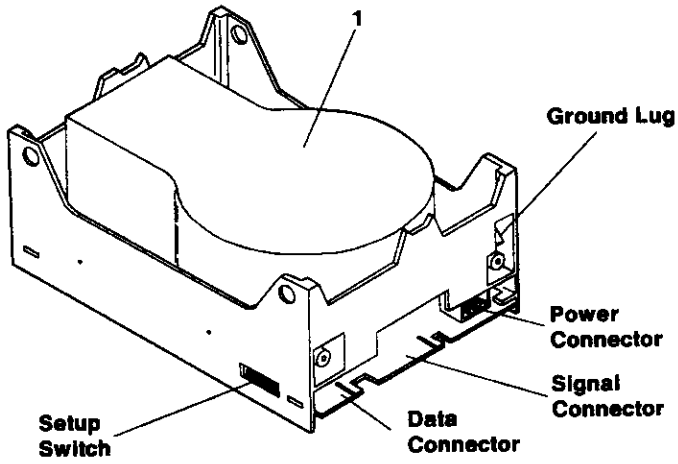
Drive Setup Switch Settings

Set the drive setup switches as shown.



AJZB237

Parts Information



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Index Number	Part Number	Description
1	08F3358 61X6800	Fixed-disk drive type E310 Fixed-disk and diskette drive cable

Fixed-Disk Drive Type H310

The Fixed-Disk Drive Type H310 has a storage capacity of at least 310M bytes of formatted data.

The fixed-disk drive in the RT PC 310MB Extended ESDI Fixed-Disk Drive option may be either a Fixed-Disk Drive Type E310 or a Fixed-Disk Drive Type H310.

There are no adjustments or individually field-replaceable parts on this drive.

Specifications

Drive positions	IBM 6151 - C IBM 6156 - F, G, H
Disk Size	5.25 inch fixed disk
Adapter	Extended ESDI Magnetic Media Adapter or Portable Disk Drive Adapter

Removal Procedure

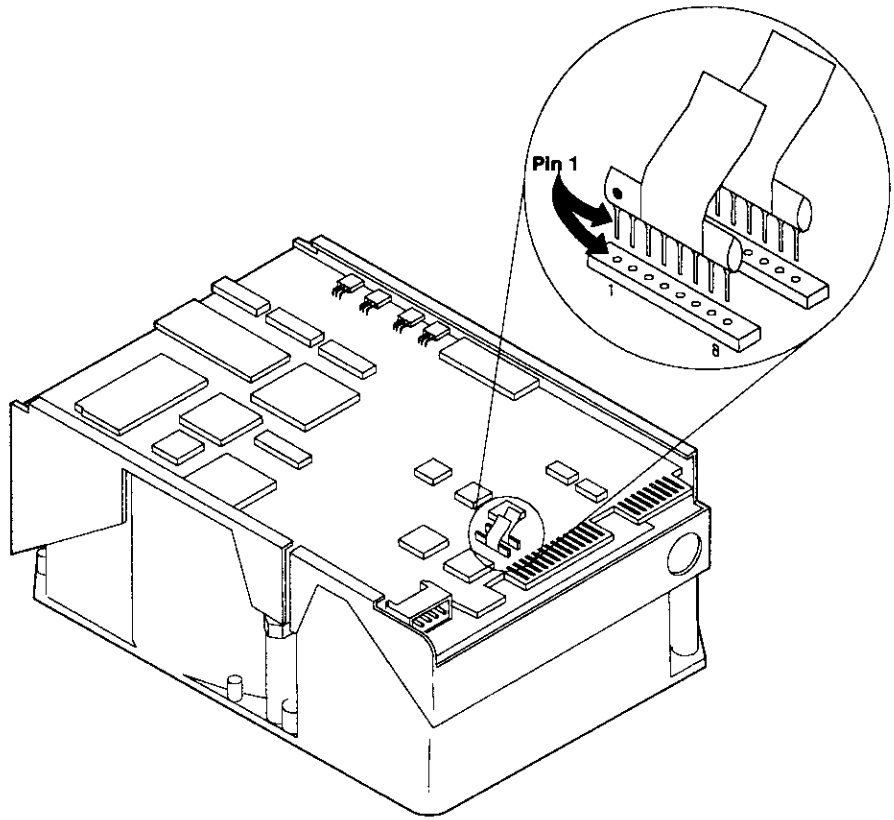
Use the Fixed-Disk Drive Removal procedure in Section 4.

Replacement Procedure

Use the Fixed-Disk Drive Replacement procedure in Section 4.

Terminator Resistors

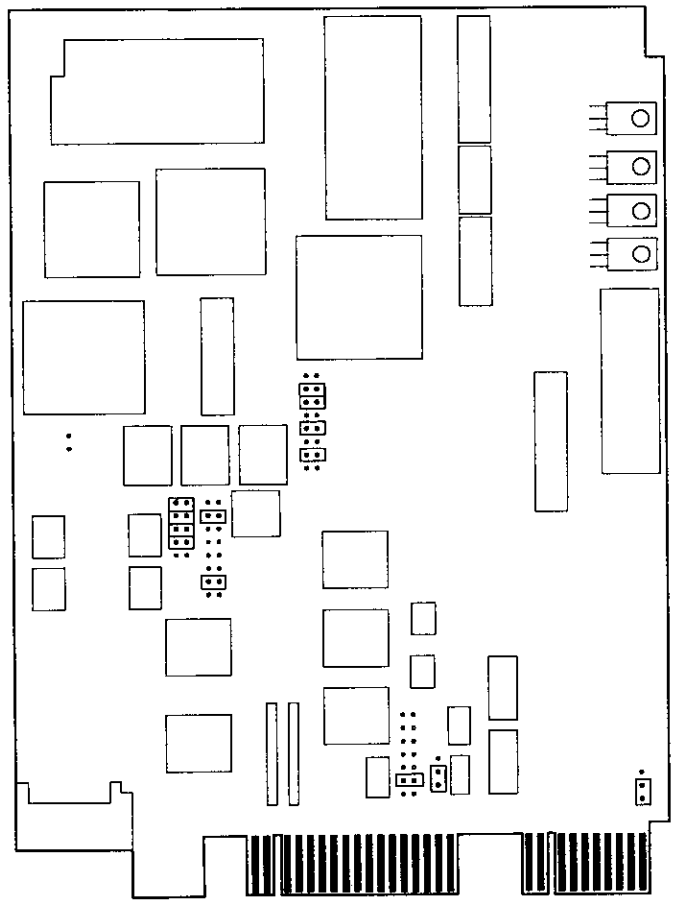
For drive positions C, F, G, or H, install the terminator resistors if they are not already installed.



AJZB259

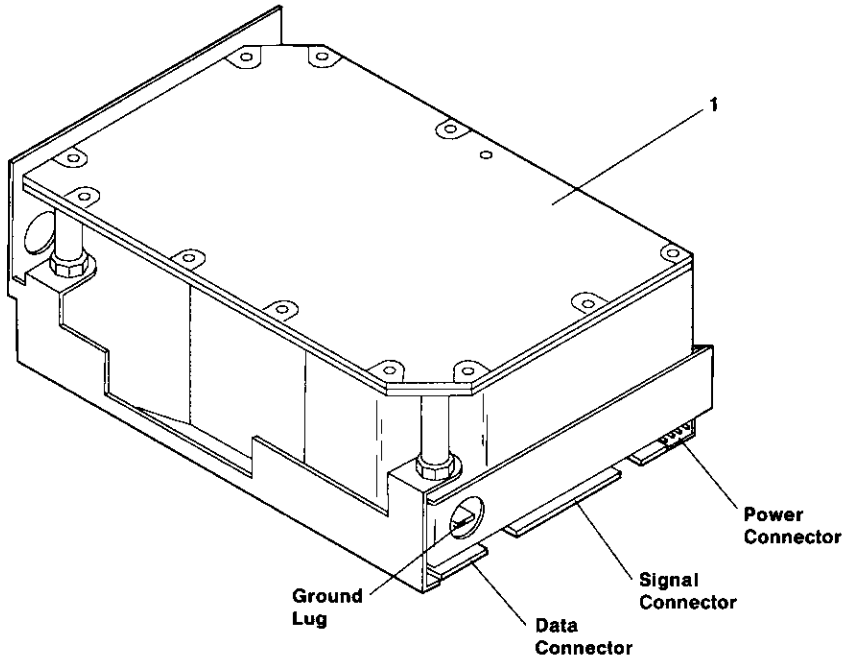
Jumper Settings

Set the jumpers as shown.



AJZB260

Parts Information



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Index Number	Part Number	Description
1	08F3358 61X6800	Fixed-disk drive type H310 Fixed-disk and diskette drive cable