

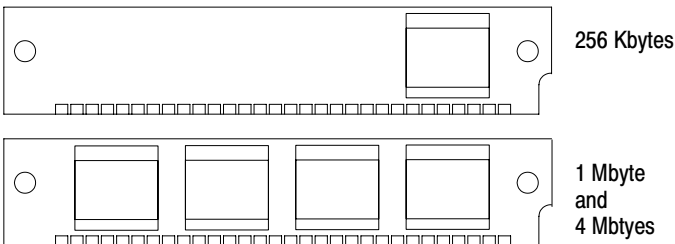
# Control Coprocessor 1771-DRS, 1771-DRS1, and 1771-DRS4 SIMM

## Installation Data

### Single Inline Memory Module

You can add static RAM memory to your control coprocessor main module to expand user memory. The RAM single inline memory module (SIMM) is available in the following sizes:

- 256 Kbytes (1771-DRS)
- 1 Mbyte (1771-DRS1)
- 4 Mbytes (1771-DRS4)



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### Prevent Electrostatic Discharge Damage

The control coprocessor is sensitive to electrostatic discharge (ESD). ESD can damage integrated circuits or semiconductors in the module. ESD can also damage the module when you add a SIMM (RAM memory) unit.



**ATTENTION:** Do not handle the control coprocessor or SIMM without approved ESD protection. Wear a wrist strap that is attached to an approved grounding point where it remains attached at all times during installation/removal procedures.

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Observe the following precautions to avoid ESD damage:

- Remain in contact with an approved ground point (wear a properly grounded wrist strap).
- Place the control coprocessor in a static-safe bag when it is not installed in the I/O chassis unless you are installing a SIMM unit.
- Do not touch the backplane connector or connector pins.

## **Adding a SIMM to Your Control Coprocessor**

You need the following to install/replace a SIMM unit in your control coprocessor:

- ESD grounding wrist strap
- 5/16-inch hex socket driver
- 3/16-inch hex socket driver
- phillips screw driver (for removing the coprocessor from a PLC-5/11, -5/20, -5/30, -5/40, -5/40L, -5/60, or -5/60L processor)

## **Remove the Control Coprocessor**

For instructions on removing the control coprocessor, see Chapter 2, Installing the Control Coprocessor, in the *1771 Control Coprocessor User Manual* (1771-6.5.95).

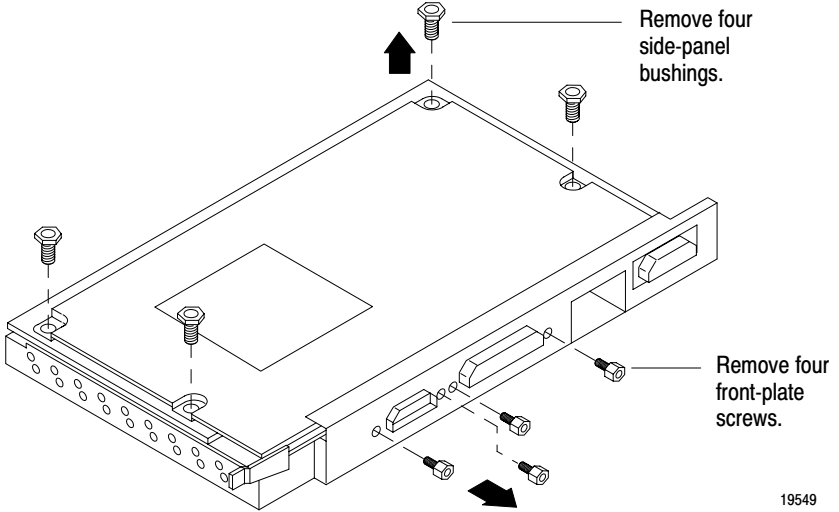
## **Disassemble the Control Coprocessor**

To disassemble the control coprocessor, perform the following steps.

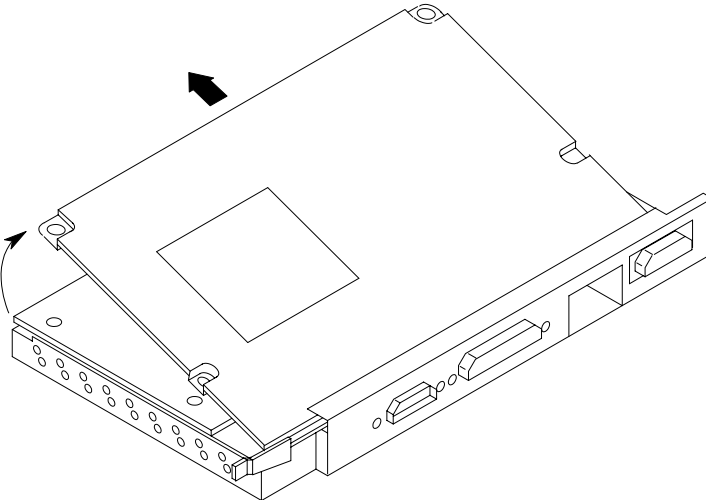
1. Remove the battery. Refer to the *1771 Control Coprocessor User Manual* (1771-6.5.95).
2. Loosen the four bushings on the right side-panel using a 5/16-inch socket driver; loosen the four front-plate screws using a 3/16-inch socket driver.

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and 1771-DRS4**

3. Remove the bushings and screws (keep the washers with the screws).



4. Remove the right side cover, pulling the lip from under the front plate.

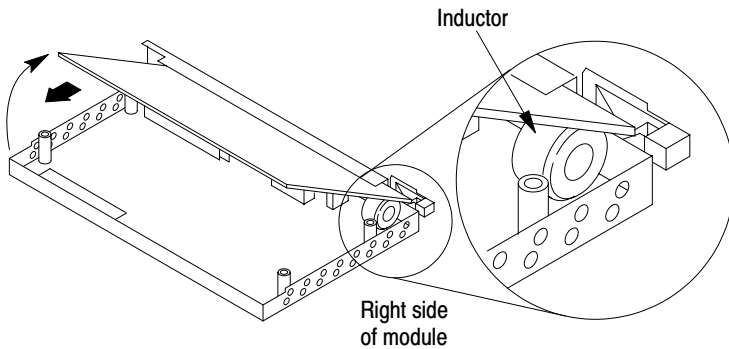


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and 1771-DRS4**



**ATTENTION:** Use care when you remove the circuit board from the control coprocessor. Carefully remove the connectors from the front-plate cutouts. Also, be careful not to scratch the inductor.

5. Lift up the edge of the circuit card and remove from the control coprocessor.



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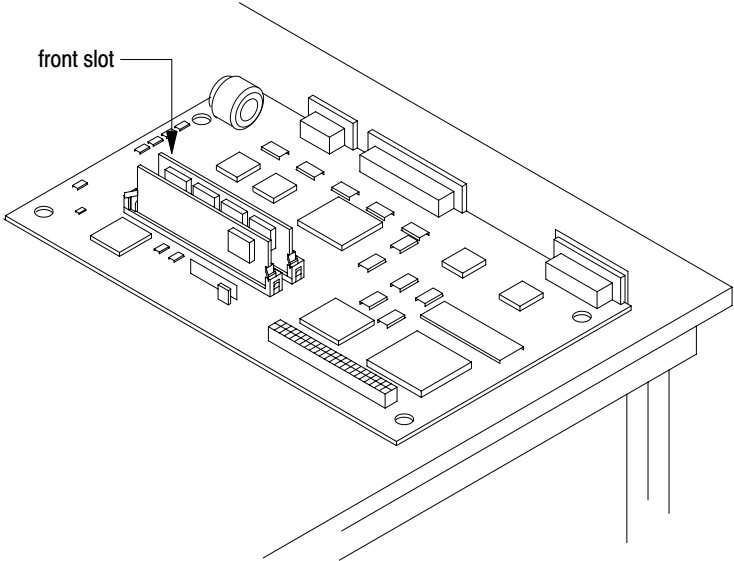
6. Place the circuit card flat on an anti-static workstation surface.

To perform the following:	Go to:
Install an additional SIMM	page 5
Replace a SIMM	page 7

**Install/Replace the SIMM**

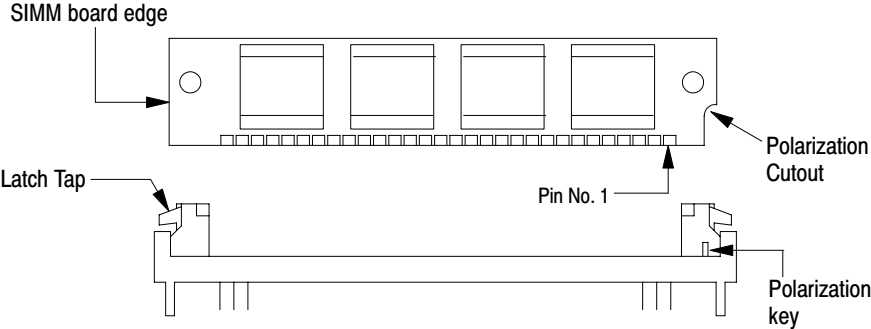
To install a SIMM, complete the following steps.

**Important:** If you plan to install two SIMM units, place the SIMM unit with more memory in the slot closest to the front of the module.



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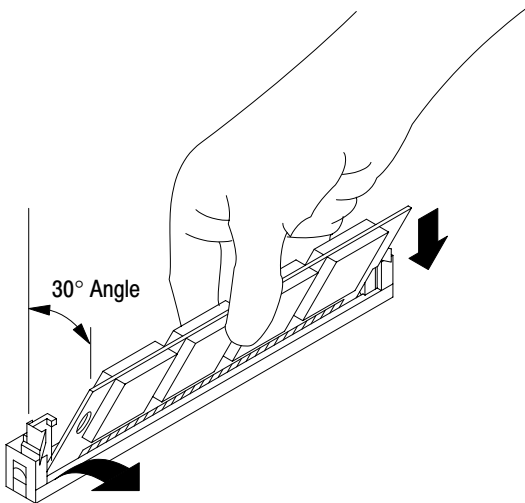
1. Align pin number 1 on the edge of the SIMM with the polarization key on the connector. The cutout will be toward the bottom of the module.



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**and 1771-DRS4**

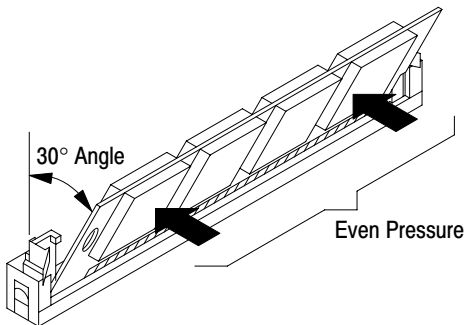
2. Insert the SIMM into the slot at a 30° angle.



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**Important:** Make sure the SIMM is fully seated in the slot before you snap it into position.

3. Maintain an even pressure over the length of the SIMM and snap the SIMM behind the latch tabs of the connector. You may need to exert a slight force to engage the latch tabs at both ends of the connector.



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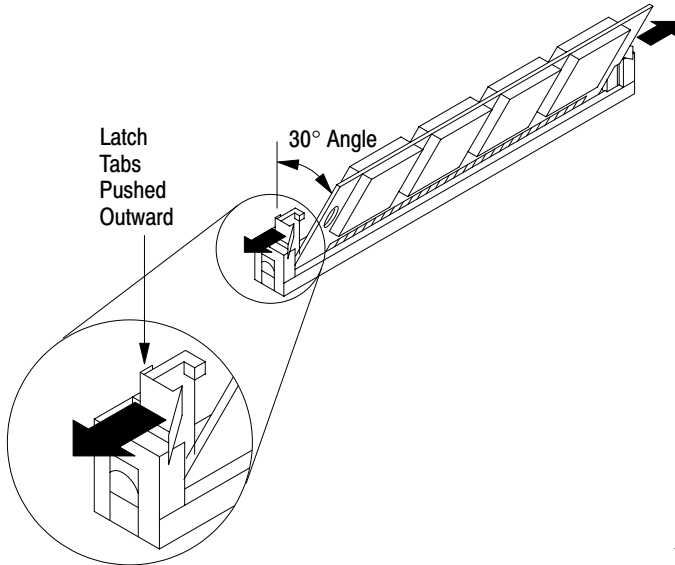


**ATTENTION:** Both latch tabs must be engaged and the plastic protrusions of the connector positioned within the holes in the SIMM. Failure to engage both latch tabs may result in a poor connection for the SIMM, broken latches, and replacement of the connector.

## Remove the SIMM

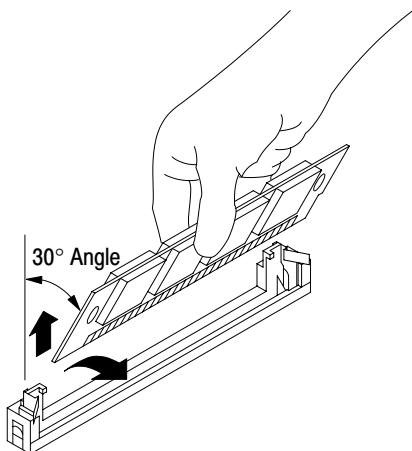
To remove the SIMM, perform the following steps.

1. Remove and disassemble the control coprocessor.
2. Place your thumbs over the metal latch tabs on the connector and push the tabs away from the sides of the connector.



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3. Remove the SIMM from its connector by evenly pulling it outward at a 30° angle.



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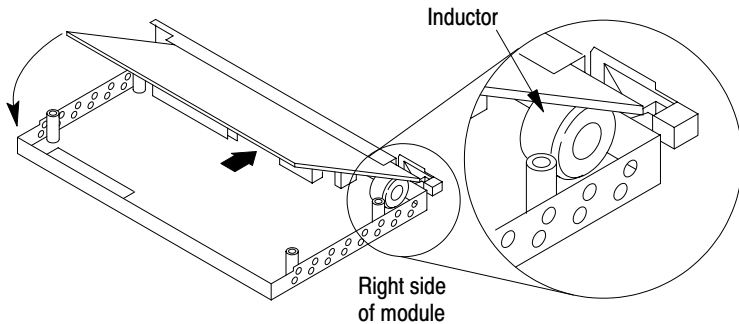
**Assemble the Control Coprocessor**

To assemble the control coprocessor, complete the following steps.



**ATTENTION:** Use care when you install the circuit board into the control coprocessor. Carefully seat the connectors in the front-plate cutouts. Also, carefully place the right side-cover over the circuit card, taking care to avoid components and not scratch the inductor.

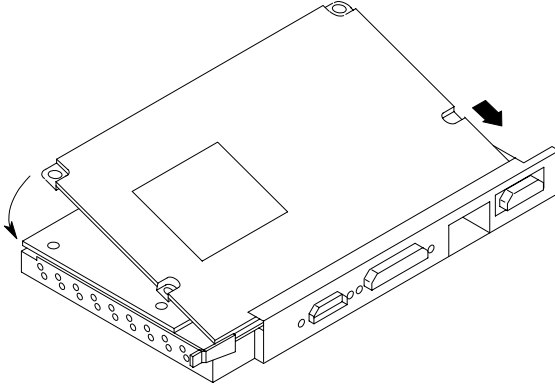
1. Install the circuit card into the control coprocessor, carefully aligning the connectors with the cutouts in the front plate and the battery connector with the battery receptacle.



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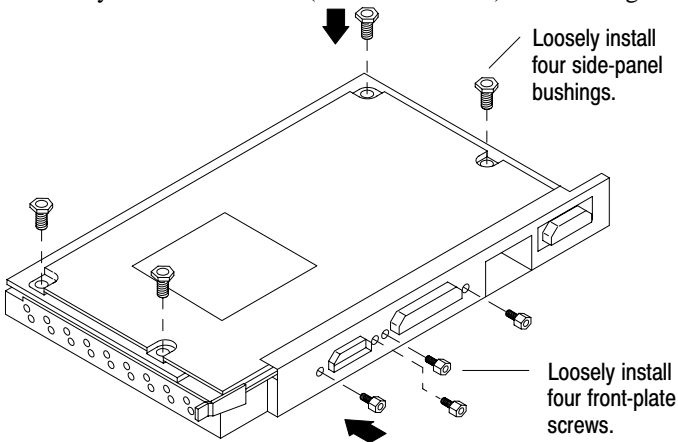


2. Install the right side-cover.



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3. Loosely install the screws (with the washers) and bushings.



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4. First tighten the four front-plate screws using a 3/16-inch socket driver; then tighten the four side-panel bushings using a 5/16-inch socket driver. Do not overtighten.

**Important:** The specifications for torque are 4 inch pounds for the screws and 5 to 6 inch pounds for the bushings.

5. Install the battery. Refer to *1771 Control Coprocessor User Manual* (1771-6.5.95).

### **Install the Control Coprocessor**

For instructions on installing the control coprocessor, see Chapter 2, Installing the Control Coprocessor, in the *1771 Control Coprocessor User Manual*.

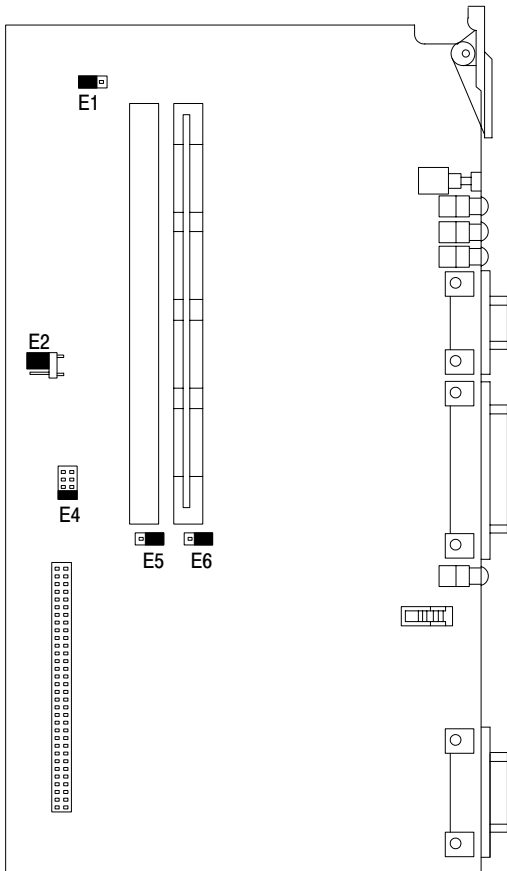
**SIMM Installation Data**  
**1771-DRS, 1771-DRS1,**  
**and 1771-DRS4**

## Locating Jumpers on the Circuit Board

The following shows the location of the jumpers on the control coprocessor circuit board and how the jumpers are configured.



**ATTENTION:** The jumpers are factory configured and should not be moved.



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