



***Allen-Bradley***

## **SLC 500 Modular Hardware Style**

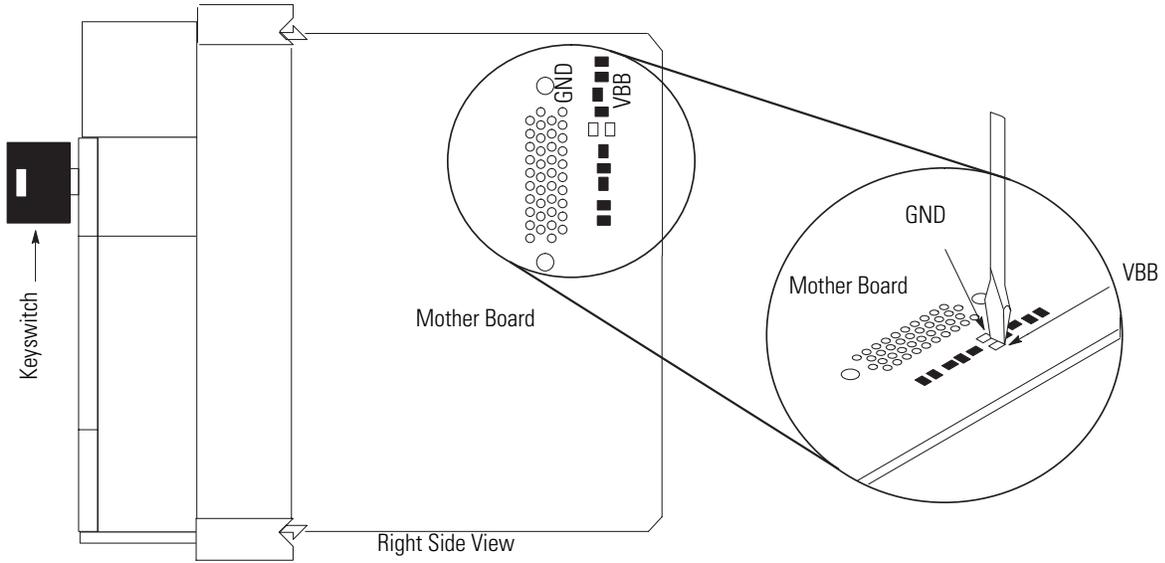
### **Catalog Numbers**

**1747-L511, 1747-L514, 1747-L524,  
1747-L531, 1747-L532, 1747-L533,  
1747-L541, 1747-L542, 1747-L543,  
1747-L551, 1747-L552, 1747-L553**

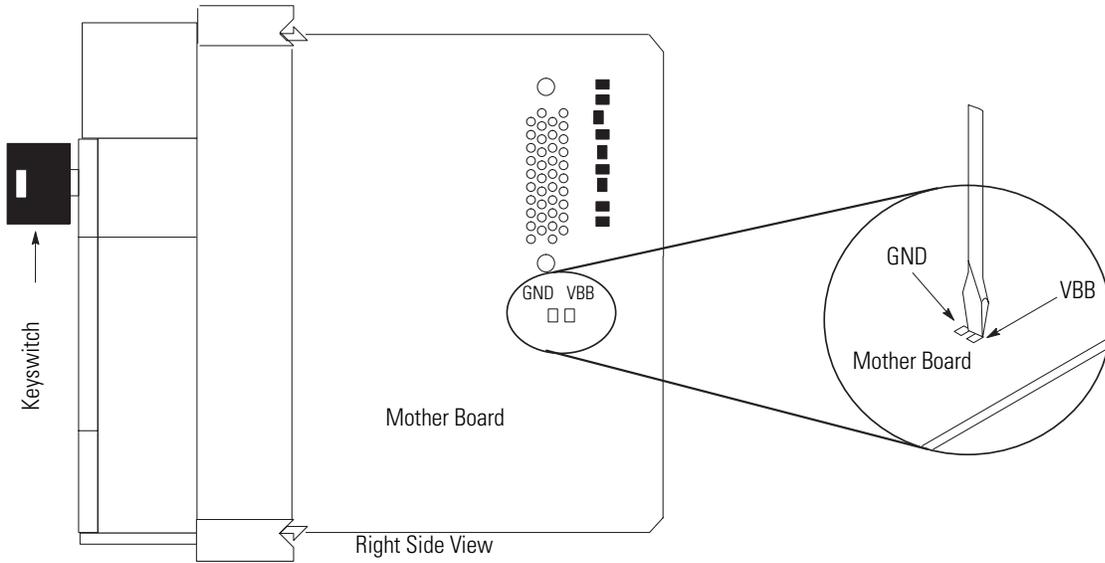
**User Manual**

**Rockwell  
Automation**

**SLC 5/03 Processors (1747-L531, 1747-L532, and 1747-L533)**



**SLC 5/04 Processors (1747-L541, 1747-L542, and 1747-L543)  
SLC 5/05 Processors (1747-L551, 1747-L552, and 1747-L553)**



programmer. The 1747-M15 Series B adapter socket **is required** for use with the memory module (catalog number 1747-M13).

**ATTENTION**

Make sure the adapter is inserted properly in the programming equipment or damage could result.

See the table below for details on the Flash EPROM and adapter socket.

**Memory Module Compatibility**

Cat. No.	Description	Use with this processor type		
		SLC 5/03	SLC 5/04	SLC 5/05
		1747-L531, 1747-L532, 1747-L533	1747-L541, 1747-L542, 1747-L543	1747-L551, 1747-L552, 1747-L553
1747-M13	Supports up to 64 K of user-memory backup	X (Series C OS302 or later)	X (Series C OS401 or later)	X (Series C OS501 or later)

To program a memory module, refer to your programming software user manual or help resource. Follow this procedure to program a memory module.

1. Set the memory module configuration bits (S:1/10 to S:1/12) in your offline program file. Refer to SLC 500 Instruction Set Reference Manual, publication 1747-RM001, for details on the Memory Module Configuration Bits.
2. Download your program file to your processor.
3. Go online with the processor and burn the program to the EEPROM memory module (per the instructions outlined in your programming software user manual or help resource).

**EEPROM Burning Options**

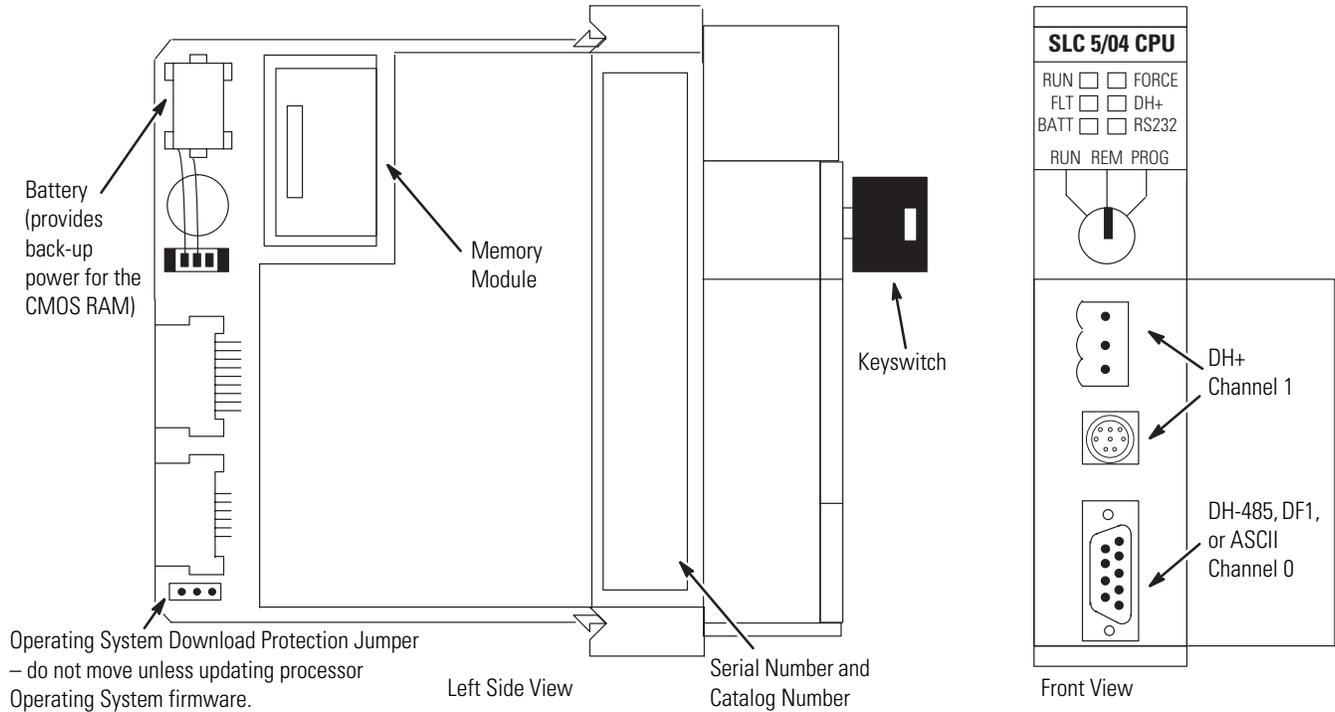
You can burn a program into an EEPROM memory module using a processor that is the same or different from the one used to run the program. When burning EEPROMs, keep the following conditions in mind:

- The processor burning the EEPROM must be of the same type and have the same OS version or lower than the target processor.

- multi-point list.
- UL listed to US and Canadian Safety Standards, CE compliant, C-Tick marked.

This figure below shows some of the hardware components of the SLC 5/04 processors (1747-L541, 1747-L542, or 1747-L543).

**SLC 5/04 Hardware Components**



The table below provides a general explanation of each processor status indicator on the SLC 5/04 processors.

**SLC 5/04 Status Indicators**

Processor Status Indicator <sup>(1)(2)</sup>	When It Is	Indicates that
RUN (Color: green)	On (steady)	The processor is in the Run mode.
	Flashing (during operation)	The processor is transferring a program from RAM to the memory module.
	Off	The processor is in a mode other than Run.
FLT (Color: red)	Flashing (at power up)	The processor has not been configured.
	Flashing (during operation)	The processor detects a major error either in the processor, chassis, or memory.
	On (steady)	A fatal error is present (no communication).
	Off	There are no errors.

## Install Your Memory Module

Always turn off power to the controller before removing the processor or inserting or removing the memory module. This guards against possible damage to the module and also undesired processor faults. Memory modules are mounted in carriers or have connectors that are keyed to guard against improper installation.

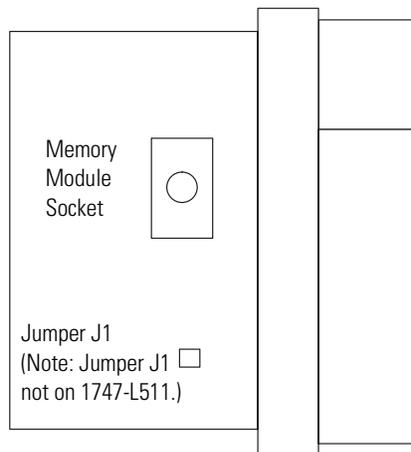
### ATTENTION



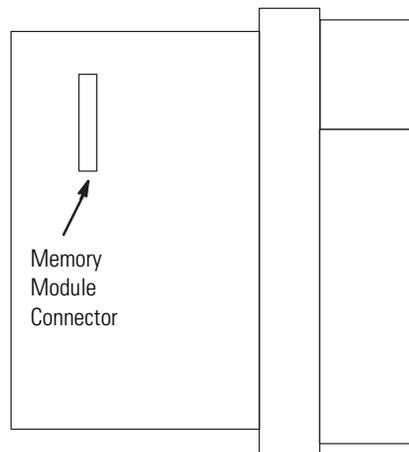
To avoid potential damage to the memory modules, handle them by the ends of the carrier or edges of the plastic housing. Skin oil and dirt can corrode metallic surfaces, inhibiting electrical contact. Also, do not expose memory modules to surfaces or areas that may typically hold an electrostatic charge. Electrostatic charges can alter or destroy memory.

1. If the processor module is installed in the chassis, remove the module by pressing the retainer clips at both the top and bottom of the module and sliding it out.
2. Locate the socket (or connector if you have an SLC 5/03, SLC 5/04, or SLC 5/05 processor) on the processor board. Then place the memory module into the socket or onto the connector and press firmly in place.

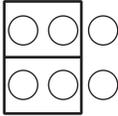
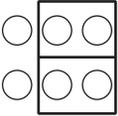
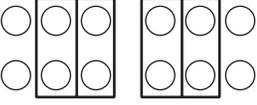
Side View of SLC Processor  
1747-L511, 1747-L514, and 1747-L524



Side View of SLC Processor  
1747-L531, 1747-L532, 1747-L533, 1747-L541, 1747-L542,  
1747-L543, 1747-L551, 1747-L552, and 1747-L553



3. Place jumper J1 as shown below.

Processor Type	1747-M1, -M2, -M3	1747-M4	Invalid Settings
1747-L514, 1747-L524			
1747-L511, 1747-L531, 1747-L532, 1747-I533, 1747-L541, 1747-L542, 1747-L543, 1747-L551, 1747-L552, 1747-L553	No Jumper J1	No Jumper J1	No Jumper J1

4. Install the processor module into the chassis.

5. Restore power to the controller.

### Remove the Memory Module

Follow this procedure to remove the memory module.

1. Remove power and pull out the processor.
2. Grasp the carrier tabs (or connector for the SLC 5/03, SLC 5/04, and SLC 5/05 processor) with your thumb and index fingers, then gently but firmly lift upwards on either end of the memory module carrier.
3. When the end is partially raised, begin lifting the other end in the same manner. Repeat this until the memory module has been completely removed from the socket.

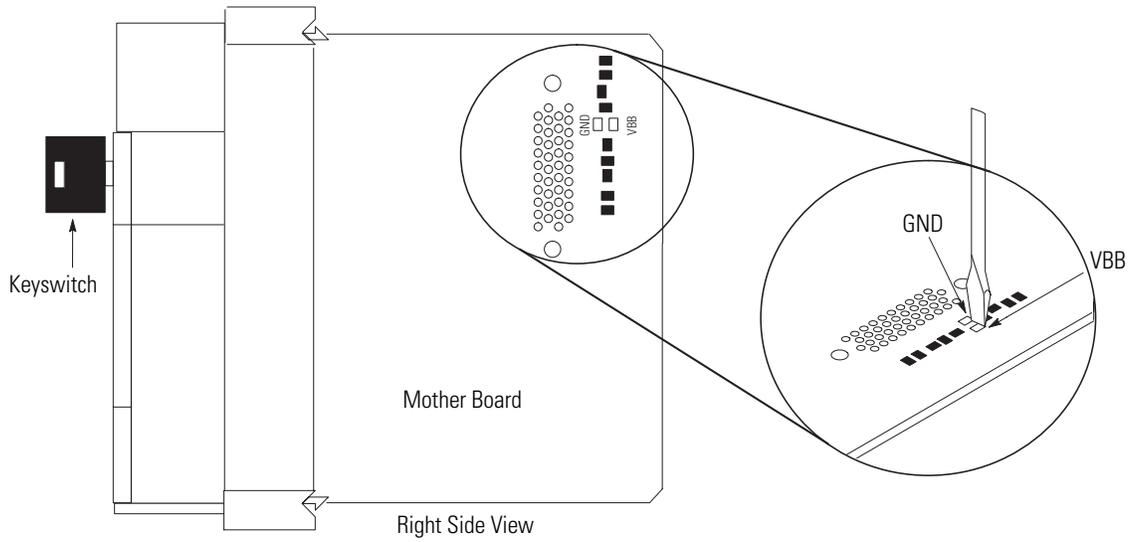
### Install Your Power Supply

If you have multiple chassis configurations, install the chassis interconnect cable before installing the power supply.

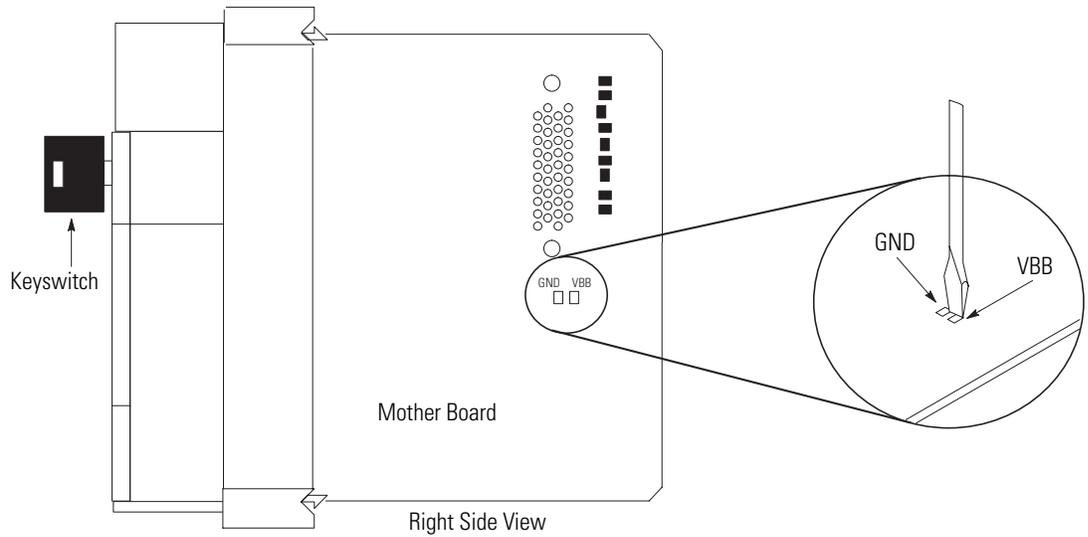
See Install Your Chassis Interconnect Cable on page 108.

Also, the power supply terminals accept two 2 mm<sup>2</sup> (#14 AWG) wires and are marked as shown in the figure on page 106.

*SLC 5/03 (1747-L531, 1747-L532 and 1747-L533) Processors*



*SLC 5/04 (1747-L541, 1747-L542, and 1747-L543)  
SLC 5/05 (1747-L551, 1747-L552, and 1747-L553) Processors*



## Replacement Terminal Blocks

Description	Cat. No.
Replacement Terminal Block (Blue) - Used with dc I/O modules, catalog numbers 1746-IB16, 1746-IC16, 1746-IH16, 1746-IV16, 1746-OBP8, 1746-OB16, 1746-OB16E, 1746-OBP16, 1746-OVP16 1746-OV16, 1746-IN16, 1746-IG16, 1746-1746OG16	1746-RT25B
Replacement Terminal Block (Orange) - Used with relay output modules, catalog numbers 1746-OW16, 1746-OX8	1746-RT25C
Replacement Terminal Block (Green) - Used with Specialty I/O modules, catalog numbers 1746-HSCE, 1746-IO12, 1746-NR4, 1746-NI8	1746-RT25G
Replacement Terminal Block (Red) - Used with ac I/O modules, catalog numbers 1746-IA16, 1746-OA16, 1746-IM16, 1746-OAP12	1746-RT25R
Replacement Terminal Block - 2-position terminal block used with analog outputs, catalog numbers 1746-NO4I, 1746-NO4V	1746-RT26
Replacement Terminal Block - 8-position terminal block used with analog outputs, catalog numbers 1746-NO4I, 1746-NO4V	1746-RT27
Replacement Terminal Block - Used with analog input modules, catalog numbers 1746-NI4, 1746-NIO4I, 1746-NIO4V, 1746-FIO4I, 1746-FIO4V	1746-RT28
Replacement Terminal Block - Used with RIO Communication modules, catalog numbers 1747-SN, 1746-DSN, 1746-DCM	1746-RT29
Replacement Terminal Block - 6-position DH-485 plug/connector; used with DH-485 Link Coupler, catalog number 1747-AIC and Advanced Interface Converter, catalog number 1761-NET-AIC	1746-RT30
Replacement Terminal Block - used with SLC 500 Remote I/O Adapter module, catalog number 1747-ASB	1746-RT31
Replacement Terminal Block - used with Thermocouple/mV module, catalog number 1746-NT4	1746-RT32
Replacement Terminal Block - 3-position DH+ connector; used with SLC 5/04 processors, catalog numbers 1747-L541, 1747-L542, -L542P, 1747-L543	1746-RT33
Replacement Terminal Block (Green) - used with Thermocouple/mV Input module, catalog number 1746-NT8	1746-RT34
Replacement Terminal Block (Green) - used with RTD/resistance Input module, catalog number 1746-NR8	1746-RT35

## Other Replacement Hardware

Description	Cat. No.
Replacement Fuses — Five fuses per package. Orders must be for multiples of five.	-
Catalog number for 1746-P1 power supply.	1746-F1
Catalog number for 1746-P2 power supply.	1746-F2
Catalog number for 1746-P3 power supply.	1746-F3
Fixed I/O ac units, MDL 1.25 Ampere.	1746-F4
Fixed I/O dc units, MDL 1.6 Ampere.	1746-F5
Catalog numbers for 1746-OBP16 and 1746-OVP16 output modules.	1746-F8
Catalog numbers for 1746-OAP12 output module.	1746-F9