

Programmable Controller IC647WMI920/320

GFK-0281D
July 1995

Work Station Interface (PS/2)

Features

- High performance programmer interface
- Combination parallel and serial interface to IC69* family of PLCs
- Resides in an IC647 computer or an IBM® Personal System/2®(PS/2®) computer
- Standard Micro-Channel® bus interface
- Configured to use PS/2 COM2 assignments
- Includes option diskette for use with standard PS/2 computers

Functions

This Work Station Interface provides a parallel or serial interface from the IC647 or PS/2 computer to the IC69* family of PLCs.

Location in System

This Work Station Interface when used as a parallel interface is connected to the Bus Transmitter Module in an IC697 PLC system as shown in figure 1.

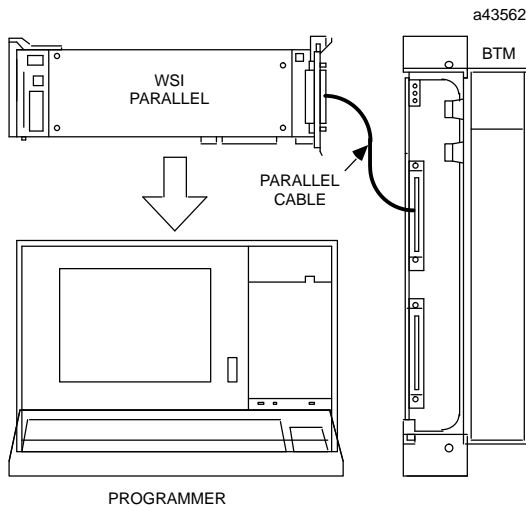
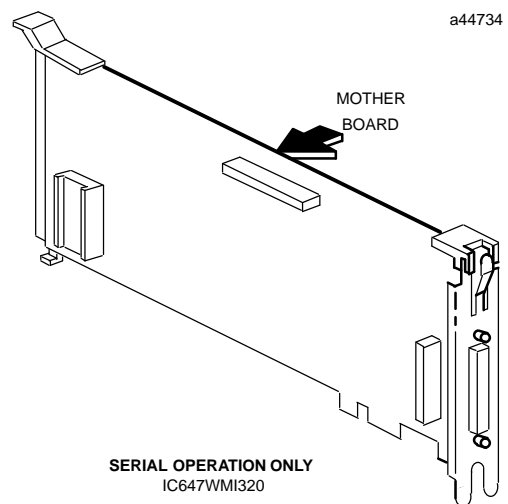
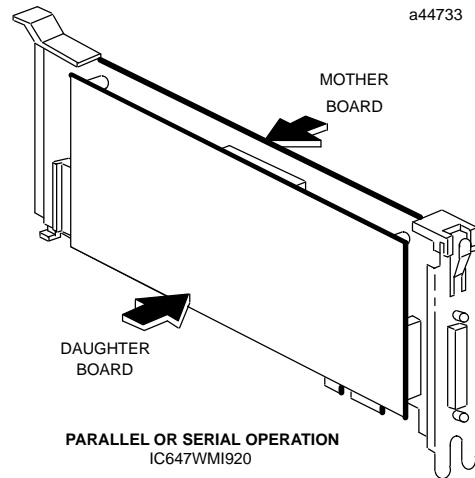


Figure 1. IC647 Computer, Parallel Work Station Interface and Bus Transmitter Module



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When used as a serial interface to an IC697 PLC system or to an IC693 PLC system, the Work Station Interface is connected as shown in figures 2 and 3.

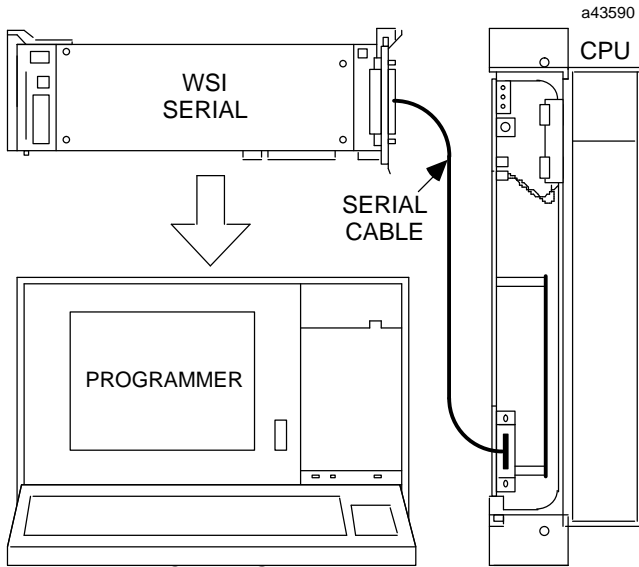


Figure 2. IC647 Computer, Serial Work Station Interface and IC697 PLC

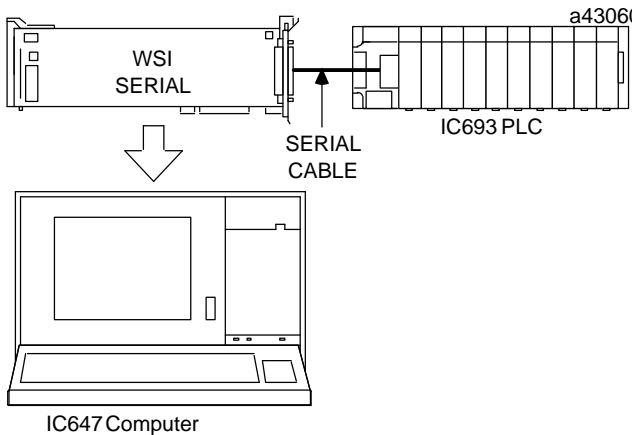
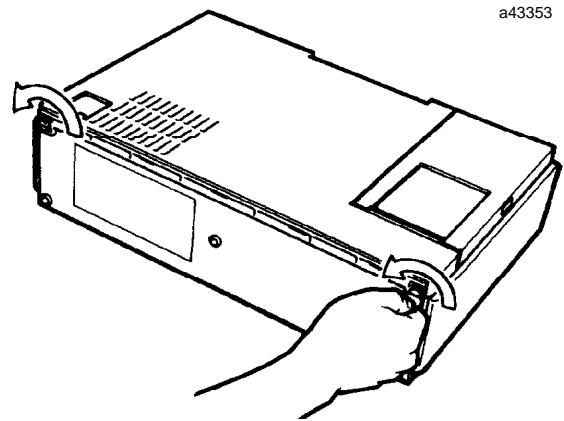


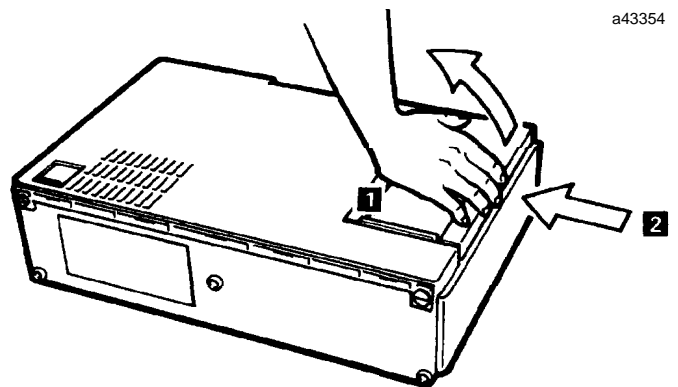
Figure 3. IC647 Computer, Serial Work Station Interface and IC693 PLC

Installation - IC647 Computer

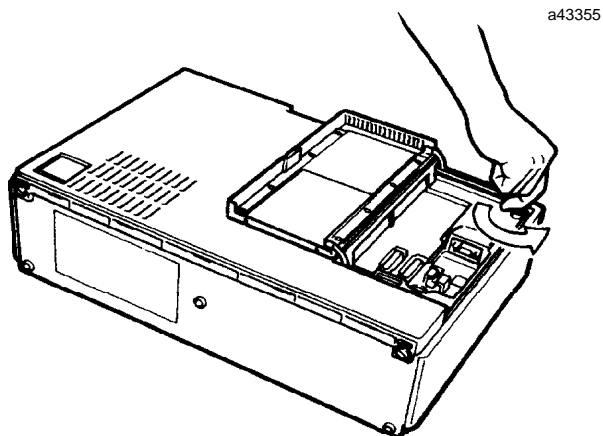
1. Turn power OFF (Power OFF IC647 computer and attached devices).
2. Unplug all computer power cords from the electrical outlets. Make a note of all cables connected to the rear of the system unit before disconnecting them.
3. Lay the system unit on its keyboard side.
4. Loosen the bottom rear cover screws with a coin or flat blade screwdriver.



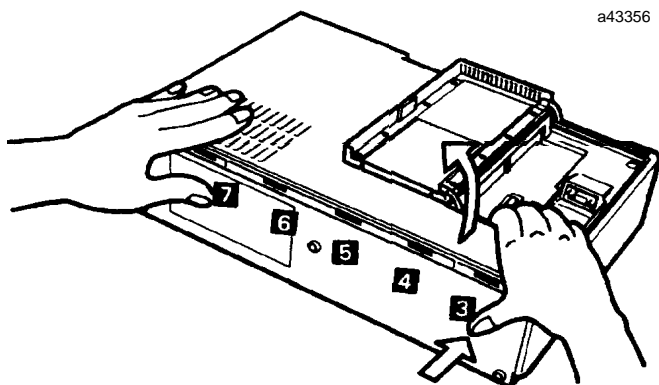
5. Open the connector housing door 1 by moving the side of the door in the direction indicated by 2.



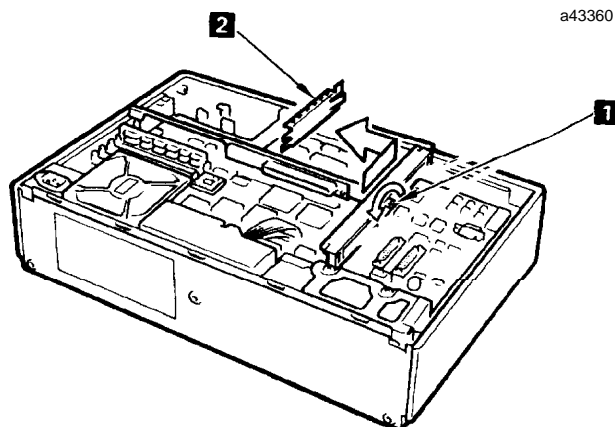
6. Loosen the rear cover screw with a coin.



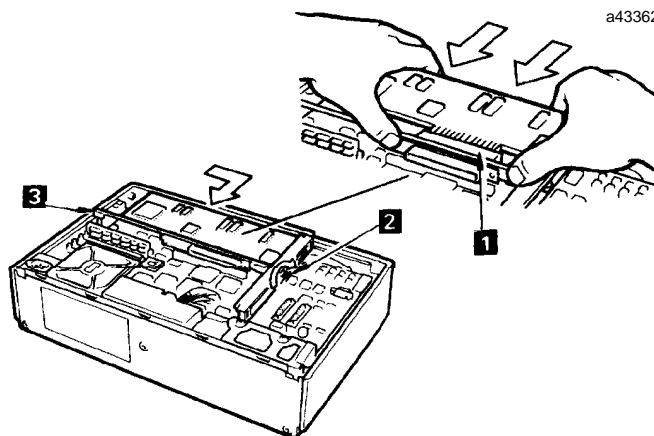
7. Move the handle to the carry position. Hold the rear cover as shown in the next figure, and lift the cover while firmly pushing the bottom at position 3 to release the first latch. Then lift the cover while strongly pushing the bottom at positions 4, 5, 6, 7 to release the other latches.



8. Before installing the Work Station Interface board into the upper expansion slot, you must remove the expansion slot cover. To do this, 1 loosen the thumbscrew (a coin may be used). Slide the expansion slot cover 2 outward, and push it to the left. You may discard the expansion slot cover.

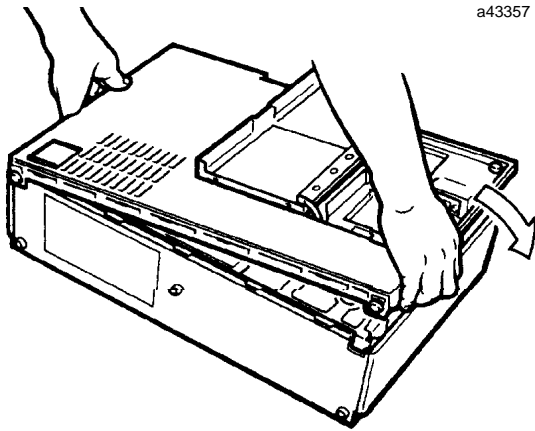


9. Align the Work Station Interface board 1 with the upper slot as shown in the next figure. Position the adapter support bracket into the holding bracket 3 before pressing the Work Station Interface into the expansion slot connector. 2 Secure the Work Station Interface in place by using the thumbscrew.

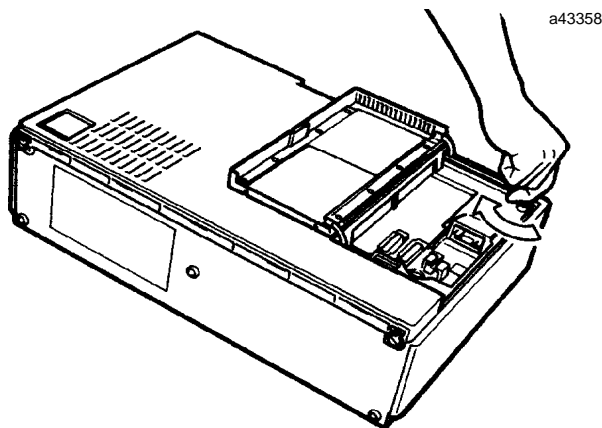


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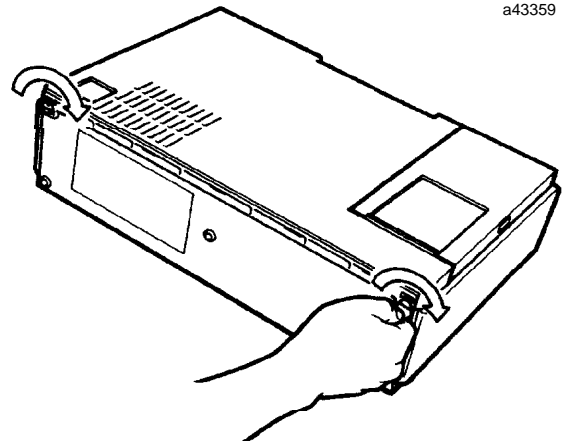
10. Replace the cover by putting its left side on the system unit and pushing its right side down until it clicks in place.



11. Lock the rear cover onto the system unit by turning the rear cover screw with a coin. *Do not overtighten the screw.*



12. Tighten the bottom rear cover screws with a coin. **Again, do not overtighten the screws.**



13. After installing the Work Station Interface, you must run the option diskette provided with the IC647 computer. Detailed information on using the option diskette can be found in Chapter 2 of the *PLC Programming Unit Guide to Operation*.

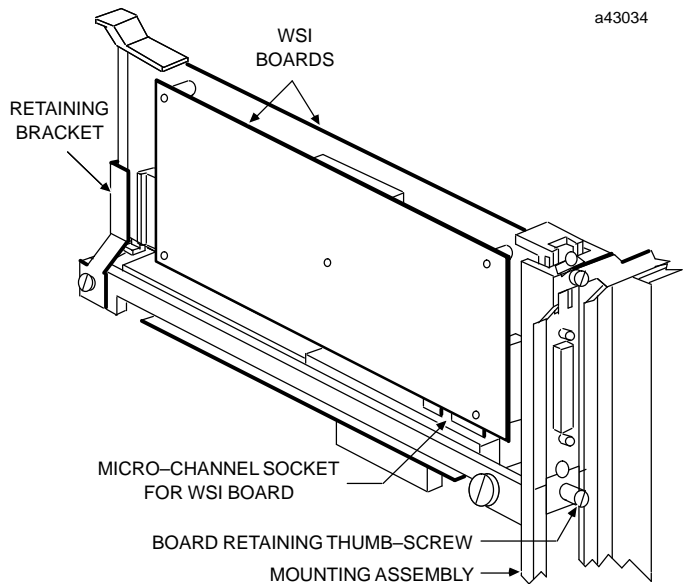


Figure 4. Detail of Work Station Interface Installation in IC647 Computer

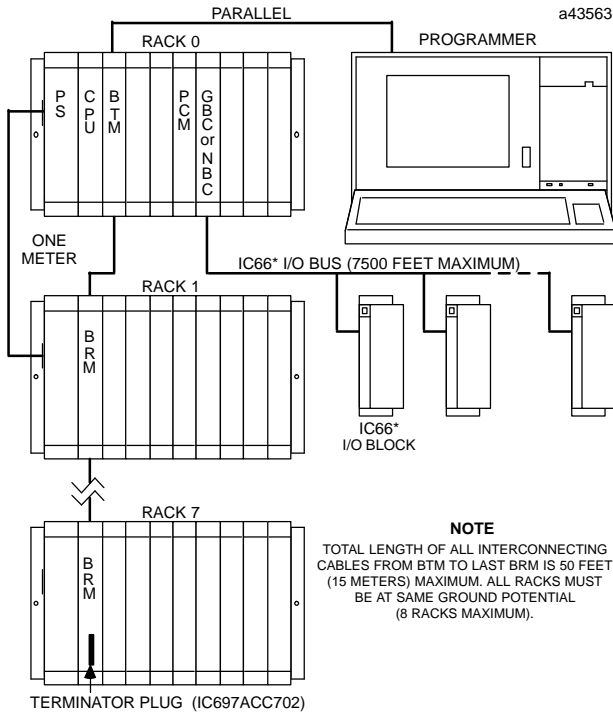


Figure 5. Typical IC697 PLC System Configuration (Parallel Interface)

Installation - Personal System/2 Computer

1. The Work Station Interface requires one full Micro-Channel slot.
2. The Work Station Interface requires one full Micro-Channel slot.
3. After installing the Work Station Interface in your PS/2, you must run the option diskette as described in the reference guide for your computer.

Cable Description

The **parallel** connection to the IC697 PLC is to the top connector on the Bus Transmitter Module through an available 10 foot (3 meters) cable, IC647CBL703 - or equivalent, as shown in figure 5.

The **serial** connection to the IC697 PLC (see figure 6) is to the serial port connector, located at the bottom of

the CPU module behind the hinged door, through an available 10 foot (3 meters) serial interface cable - IC647CBL704, or equivalent

Warning

The IC697 PLC and IC693 PLC rack and programmer ground connections must be at the same ground potential. Incorrect wiring will result in damage to the Work Station Interface module.

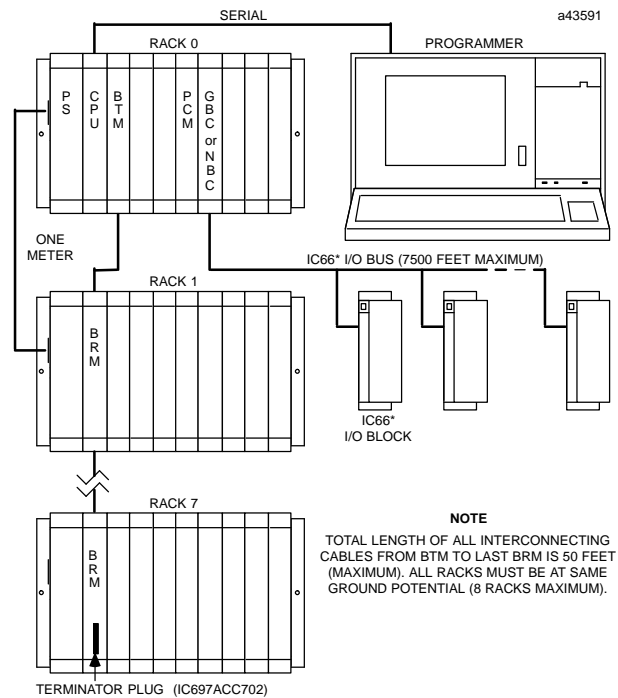


Figure 6. Typical IC697 PLC System Configuration (Serial Interface)

Serial connection to the IC693 PLC is to the serial port connector located behind the hinged door on the right front of the power supply, also through a 10 foot (3 meters) serial interface cable, IC647CBL704 - or equivalent, as shown in figure 7.

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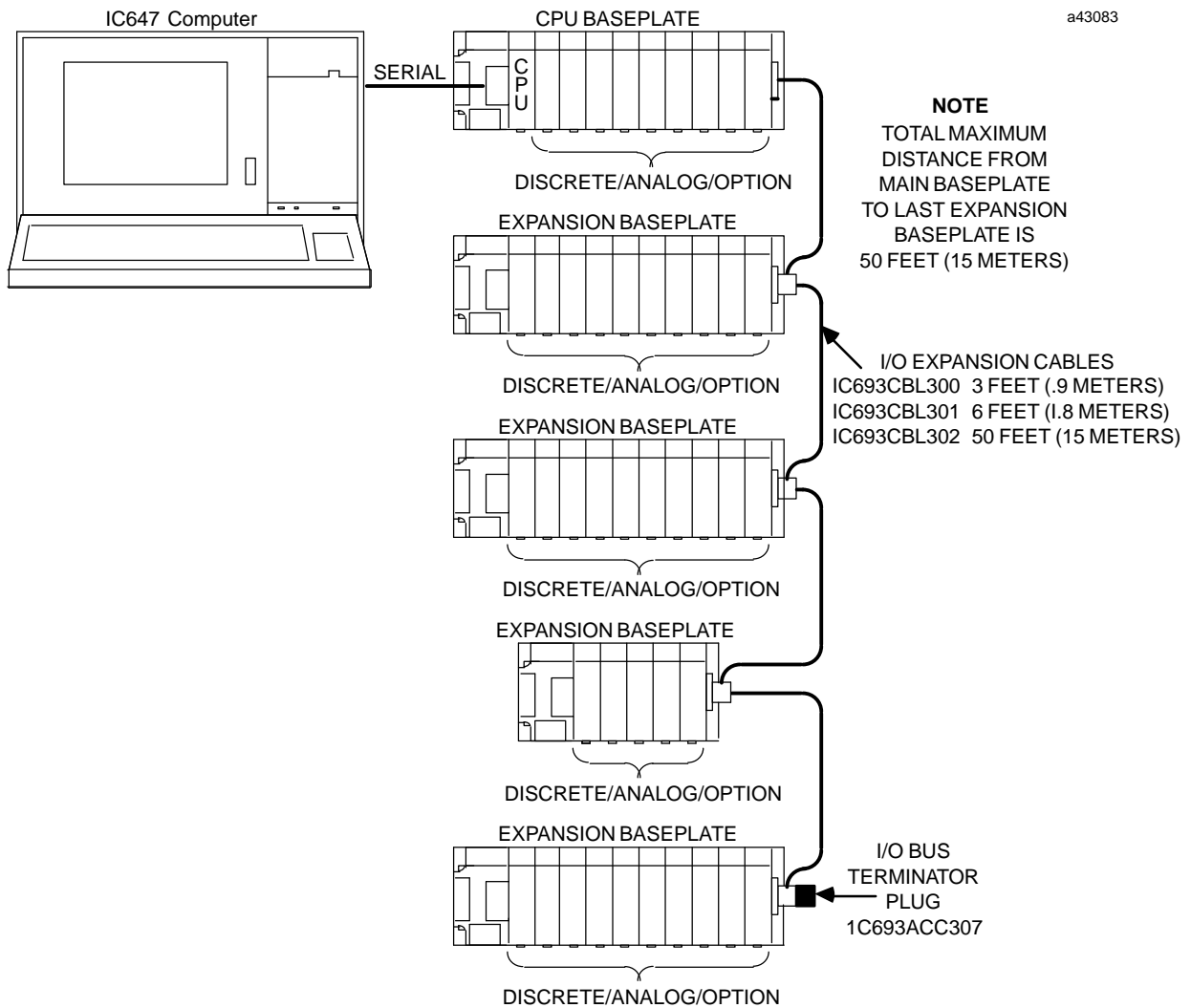


Figure 7. Typical IC693 PLC System Configuration (Serial Interface)

Table 1. References

Reference	Title
1	PLC Programming Unit Guide to Operation
2	Programming Software User's Manual (for IC697 PLC)
3	Programmable Controller Reference Manual (for IC697 PLC)
4	Programming Software User's Manual (for IC693 PLC)
5	Programming Software Reference Manual (for IC693 PLC)
6	Programmable Coprocessor Module and Support Software User's Manual
7	PCM Development Software (PCOP) User's Manual
8	Programmable Controller Installation Manual (for IC697 PLC)
9	Programmable Controller Installation Manual (for IC693 PLC)

Table 2. Specifications for IC647WMI920/320 †

ParallelInterfaceSpecification	
EffectiveDataRate	50Kbytes/second
Maximumcablelength	50 feet (15 meters)
SerialInterfaceSpecification	
MaximumDataRate	19.2KBytes/second
RS485Maximumcablelength	4000 feet (1200)
VME	System designed to support the VME standard C.1

† Refer to GFK-0867B, or later for product standards and general specifications.

Table 3. Ordering Information

Description	Catalog Number
Work Station Interface Board, Parallel/Serial	IC647WMI920
Work Station Interface Board, Serial (IC693 PLC only)	IC647WMI320
ParallelInterfaceCableAssembly, 10 feet (3 meters)	IC647CBL703
SerialInterfaceCableAssembly, 10 feet (3 meters)	IC647CBL704