1 GE Fanuc Series 90-30 Troubleshooting

Troubleshooting Guide for the GE Series 90-30 PLC System.

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TABLE OF CONTENTS

3 Introduction - 90-30 Troubleshooting

The GE Fanuc Series 90-30 PLC System has the largest installed base of all GE PLC's, therefore we felt it was important to assist users with some troubleshooting procedures.

Our 33 years of expertise allows us to provide a concise process for identifying problems, as well as procedures which will help you recover from a factory-down situation.

There's an old saying – "If you don't know where you're going, then any road will take you there."

This guide will help you identify the PLC problems, and then systematically provide you with practical solutions.

4 STEP 1 - Inspect Power Supply Status

The very first step to understanding the GE Series 90-30 PLC status is to inspect the four LED's on the front of the power supply. When the green LED power LED is on, it indicates that all power in and out of the power supply appears to be functional.

If this LED is off, install a battery on the front of your CPU to maintain the program, and then simply replace the power supply.

Note: The Series 90-30 has 8 different power supply modules. See all the modules here

Image: Inspect Green 'PWR' LED.

Power Supply Pictured **IC693PWR321**

5 STEP 2 - Inspect CPU Power-Up Status

The green ‘OK’ LED indicates that the CPU appears to pass its power-up test. If this LED is off, then replace your CPU. There is most likely a hardware fault in the CPU module.

Note: The Series 90-30 has 17 CPU modules. See all the modules here

Image: Inspect Green ‘OK’ LED.

Power Supply Pictured **IC693PWR321**

6 STEP 3 - Inspect CPU Run Status

The green ‘RUN’ LED indicates that the CPU is in run mode and is solving program logic properly. if this LED is green, your problem most likely lies with the failed devices such as I/O modules, and not the PLC system.

If this LED is off, we will walk you through troubleshooting later in this guide.

Image: Inspect Green ‘RUN’ LED.

Power Supply Pictured **IC693PWR321**

7 STEP 4 - Inspect Battery Status

Finally, the red ‘BATT’ LED should be off, which indicates that your battery is good. If the red LED is on:

- Remove the bottom door labeled ‘battery’ on the power supply. Carefully replace the battery while the PLC is powered up. In many cases, there are two connectors; one connector for the new battery, and one for the current installed battery.
- Install the new battery before removing the old battery.
- DO NOT power down your PLC System or you will most likely lose your program during the battery change-out process.

Image: Inspect ‘BATT’ LED.

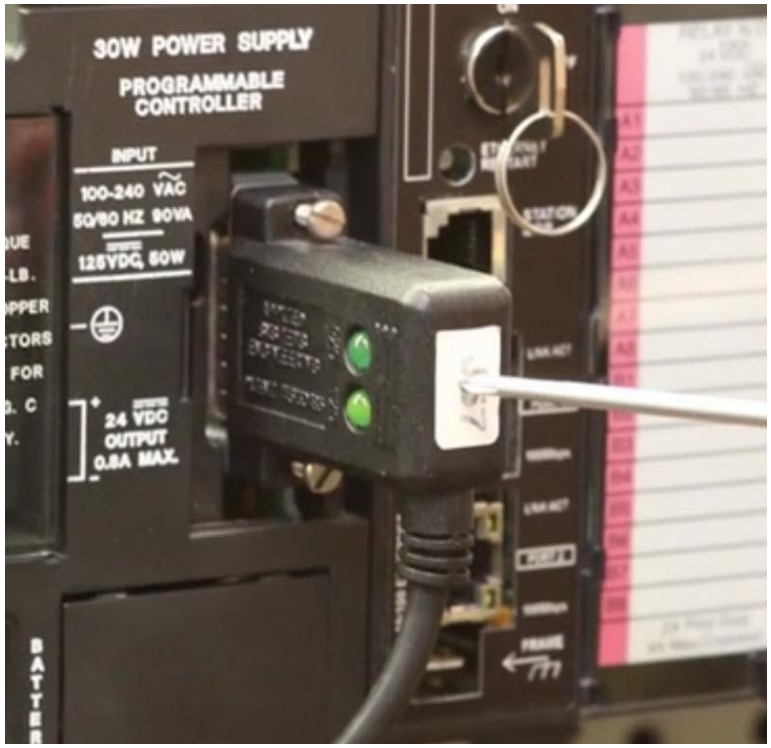
Power Supply Pictured **IC693PWR321**

8 STEP 5 - CPU Out Of 'RUN' Mode

The most common failure of the GE Series 90-30 is the 'RUN' LED is off, which generally indicates that an incident has forced the CPU out of 'RUN' mode.

Connect your programming unit to the RS-485 Serial Port on the power supply, and then navigate to the fault tables in your programming software.

Image: Connect RS-485 Programming Cable.

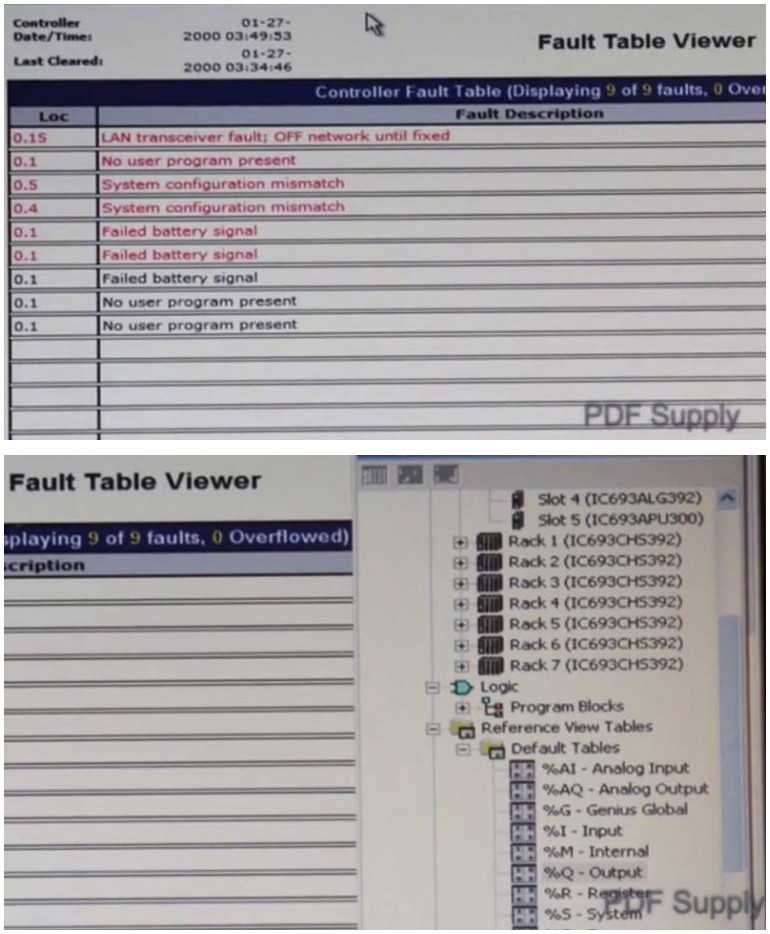


9 STEP 6 - View Fault Tables

There are two basic fault tables; I/O and CPU. There, you will find time and date stamp faults that have caused your system to exit 'RUN' mode.

In many cases, it will identify rack and slot positions of a failed module. Once you have fixed the issue creating the fault, clear the fault tables so that any additional faults will be logged at next power up. Continue this process until your Series 90-30 PLC System is back up and running.

Image: Controller Fault Table Viewer



10 STEP 7 - Additional Support Options

We hope our troubleshooting guide has helped you track down the problem in your PLC system.

Should you to need to repair or replace any parts for your GE Fanuc 90-30 PLC, please contact us at **1-800-360-6802** or visit our website at **www.pdfsupply.com**

We offer:

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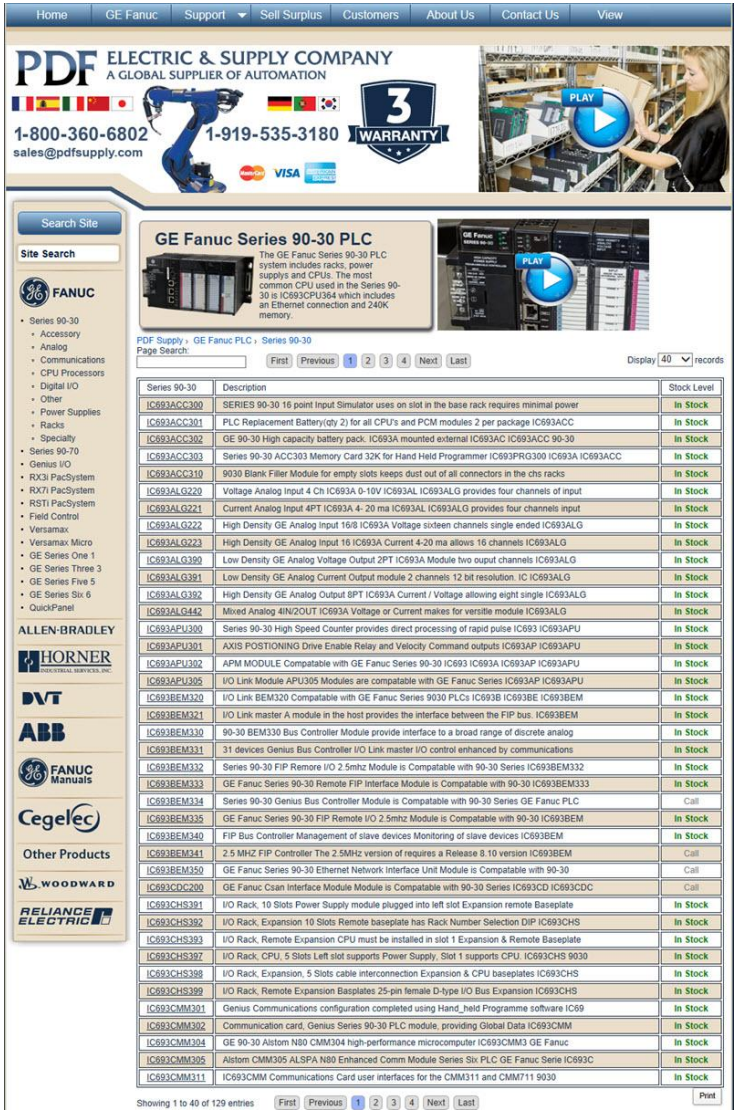

10 Contact Details

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