

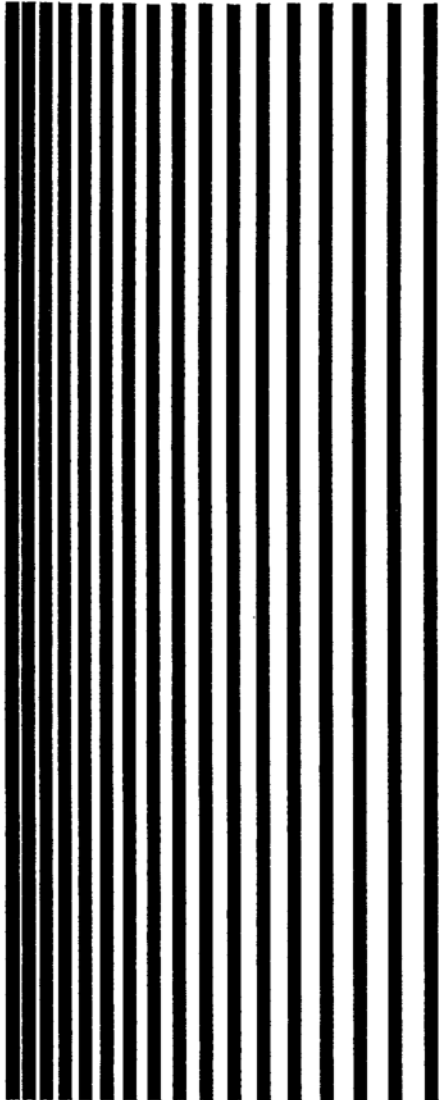
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**TECHNICAL
REPORT**

TROUBLE SHOOTING CHECKLIST
FOR WAVE SOLDERING
OF PRINTED WIRING BOARDS

PREPARED BY
THE SOLDERING SUBCOMMITTEE
OF THE ASSEMBLY AND JOINING
TECHNIQUES COMMITTEE



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TROUBLE SHOOTING CHECKLIST FOR WAVE SOLDERING OF PRINTED WIRING BOARDS

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FOREWORD

The material published in this document is a compilation of contributions from members of several committees coordinated by the Soldering/Solderability Specification Task Group.

The objective of this document is to provide a checklist of causes and recommended corrective actions for various process problems encountered during the wave soldering of printed wiring board assemblies. These problems may or may not be yielding results defined as rejectable by applicable specifications.

IPC members, and others who utilize this checklist, are invited to contribute additional ideas they may have regarding causes of problems, and recommended corrective actions.

INVESTIGATING THE PROBLEM

Successful development of positive corrective action in problem solving depends largely on the organization and logic of the investigator. The initial steps of investigation must include:

- (a) defining the problem
- (b) verification of the problem
(to your definition)
- (c) determination of the fixed and
variable elements of the process
- (d) developing a plan
- (e) implementing the plan

It is suggested that in the course of applying the data in this document, change a single variable at a time from condition zero before introducing multi variable changes. Interactions and their effects can be misleading.

For each problem area Potential Causes and Corrective Actions are grouped.

- A - Machine Controllable
- B - Not Machine Controllable

In addition, an attempt has been made to place the most frequent potential cause first in each listing. This is based on collective experience but may not hold in every instance.