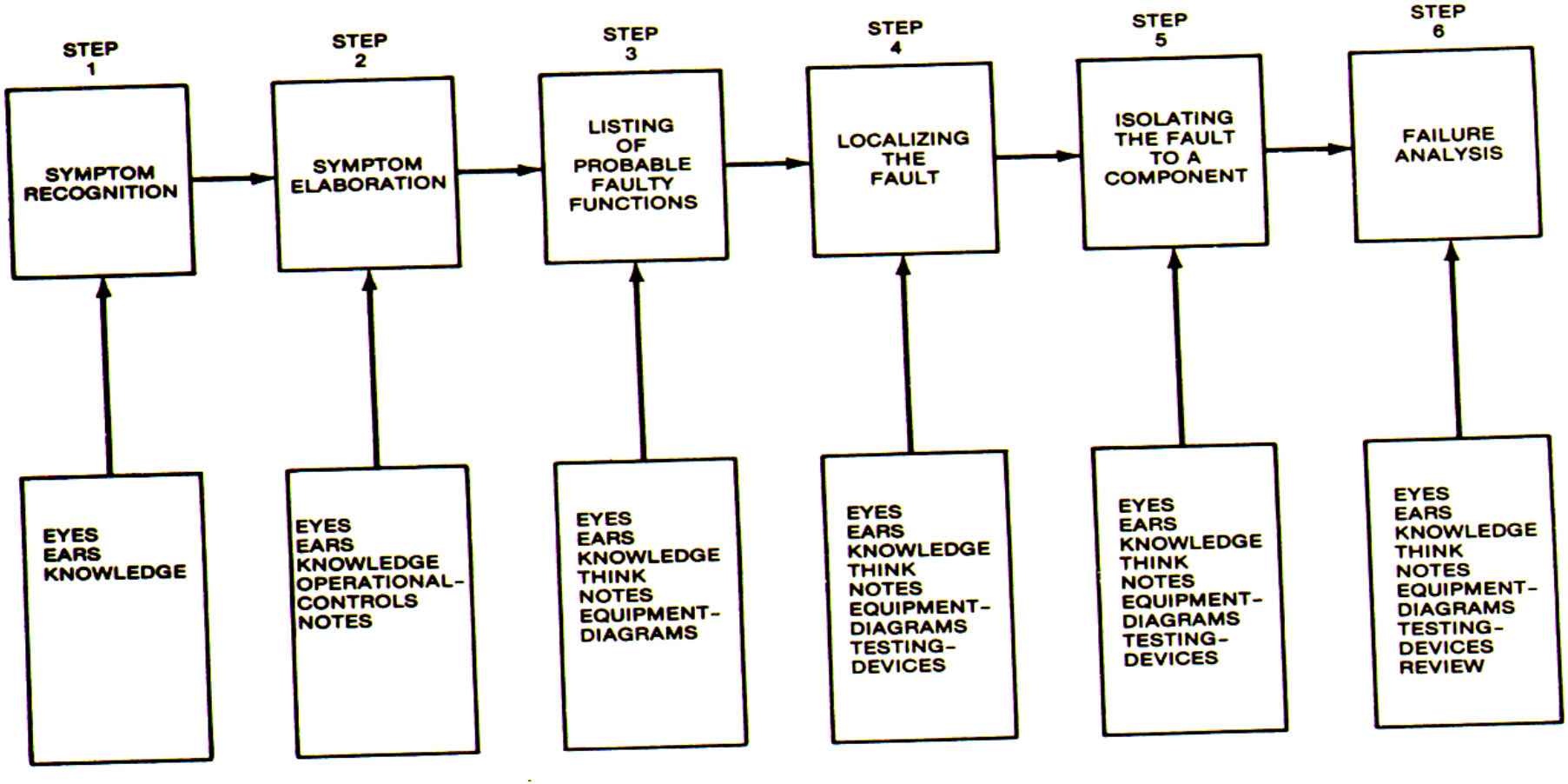
UNIT-5

OVERHAUL PROCEDURES

TROUBLESHOOTING – PROCEDURES FOR TROUBLE SHOOTING

SIX STEP IN TROUBLE SHOOTING



SYMPTOMS OF FAILURE

1. SYSTEM RECOGNITION:

The first step in trouble shooting – involves having knowledge of engine condition that is not normal and knowing to what extent the fault is affecting the engines performance.

2. SYSTEM ELABORATION:

It is the next logical step, once a fault or malfunction has been detected. Test equipment helps the technician to evaluate the performance of the engine and its components. The technicians should use these aids to assess the effects of the symptoms and to provide additional information to further define the symptoms.

3. LIST OF PROBABLE FAULTY FUNCTIONS

When the technician has located all the symptoms of malfunction or fault it is the third step to list the possible causes. To aid this process, manufacturer manual list the 'probable cause' for the symptom and corrective action.

4. LOCALIZING THE FAULT

Localizing the fault means, to determine which functional system of the engine is creating problem. This trouble may be traced by trouble shooting charts.

5. ISOLATING THE FAULT TO A COMPONENT

Once the malfunction is isolated to one system, additional testing is done to isolate the fault to a specific component. The technicians use test equipments to measure the correct output for various components.

6. FAILURE ANALYSIS

•Once the fault or malfunction traced to a specific component, attempt to be made to determine the cause of failure.

•Without analyzing the reason, substituting a new component into the system will damage the new component.

•If the component is the probable cause for all the abnormal symptoms noticed earlier steps, then it can be assumed that the component is at fault.