3070-103

# Information Only Service Note

Supersedes:
NONE

## E9905E - Small Foot Print 2-Module In-Circuit Test System; i327x Plus, Series 5 (Applies only to E9905E-AS2/N1178A-AS2/N1178A-AS3 Async systems or upgrades)

Serial Numbers: ALL
Manufacturing ID Number: ALL

**The Problem** –
Fixture lock command executed from module2 virtual machine result in error R770

**Parts Required:**
P/N Description Qty.

NONE

ADMINISTRATIVE INFORMATION

| | |
|---|---|
| [[]] Calibration Required | PRODUCT LINE: PL80 |
| [x] Calibration NOT Required | AUTHOR: LKW |

ADDITIONAL INFORMATION:

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## Situation:

In a standard BT Basic environment, before you can execute the “unpowered” command or run any testplan, the test fixture must be locked down in place.

When a fix lock command is executed, software attempts to check on the fixture enable pins for all modules on the test head regardless of its test head configuration. If a 2-module fixture is engaged, then software will expect to detect a short at the fixture enable pins at its master module (module 3) and then mod2. If the fixture is engaged correctly, then it will find a short on the fixture enable pins of both modules. Similarly, if a full bank 4-module fixture is used, then software should see a short at all 4 modules positions. Any short combinations of out of these will result in error R770 (Fixture loaded incorrectly).

In an asynchronous standalone mode, module 2 does not have any access to module 3 resources. Therefore, there is no way it can detect the short of the fixture enable pins at module 3. However, it can detect the short in its own module. When a fixture lock command is executed, this results in error R770.

## Solution/Action:

When a fixture lock command is executed successfully, the fix lock state is saved in the system card of module 2. Thereafter the software uses this state to determine if it will allow the “unpowered” command to be executed.

The check on the fixture enable pins happens only with the fixture lock command. If the fixture lock is being done within the DGN diagnostic environment, then there are no checks.

What this means is that you only need to do the DGN fixture lock once after the system startup and the fixture lock state will get registered in the system card. So, if the fix lock state in the system card remains active, there is no problem in executing the testplan directly without issuing fix lock command first. Restarting the BT Basic window, virtual machines or the entire PC will not change the state of the fixture lock in the system card.

The fix lock state will reset under 2 conditions.

1. A fix unlock command is executed in the BT Basic window.
2. A test head power reset occurred which will clear all states in the system card.

In both situations above, you can reactivate the fix lock state by executing a DGN fix lock again. Then BT Basic will continue to work without the need of the fix lock command.

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Revision History:

| Date | Service Note Revision | Author | Reason for Change |
|---|---|---|---|
| 15 Mar 2022 | 01 | LKW | As Published |
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