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**INSP3450/I5/R0**

TITLE: Instruction for Inspection and Testing of Wire speed DPM PCB ASSEMBLY (PA79/530)

# SCOPE :

* 1. Applicable for testing of Wire speed DPM PCB ASSEMBLY For ERP CODE:

017.01.008.0364

# DETAILS OF THE INSTRUCTION :

* 1. Inspection / Measuring / Test Equipment. :
     1. Digital Multimeter.
     2. Wire boom for test.
     3. Record the test results (OK / NOT OK) in the test report as the testing progress. (REF: INSP4684/I5/R0).

# VISUAL INSPECTION:

* + 1. Check the sticker for software version number, it should be proper as per given in PCB BOM.

# ELECTRICAL TEST:

* + 1. Switch ON power supply of TEST JIG***.***
    2. Keep SHUNT/HALL SENSOR switch to SHUNT position and REF/CUR switch of DPM to CUR position.
    3. Vary Feedback current POT from MIN to MAX position and check voltage at respective test point (from 0 mV-75 mV)
    4. Keep feedback current POT at MIN position. Switch OFF the power supply.
    5. Connect the PCB under test, as per the given wiring diagram (Test jig CK79/906/A). Switch ON the power supply.
    6. Program the TEST PCB.

***(Microcontroller – PIC16F883 and Programming connector CN1 on TEST PCB)***

* + 1. Now check the voltage levels at the test points with respect to ground (TP2) as follows on Test PCB

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| **TEST POINT** | **VOLTAGE** |
| TP1 | +5 volts |
| TP2 | GND |
| TP5 | 0V |

* + 1. Keep feedback current POT at MIN position. Keep SHUNT/HALL SENSOR switch to SHUNT position.
    2. Keep REF/CUR switch of DPM to CUR position. Switch OFF the power supply.
    3. Switch ON power supply of TEST JIG. Set feedback current pot on TEST JIG slowly at MAX position (75mV). DPM shows 1.5 mtr/min wire speed. Maximum value should be calibrated by Preset ‘P1’.
    4. For P1 at min position display shows 1.41 (+/-0.2) mtr/min & at max position display shows 2.16 (+/-0.2) mtr/min @75mV.
    5. Now verify the voltage @ TP5 of test PCB by varying feedback current pot of TEST JIG from min to max and check the voltage at respective test point.

Prepared By, Approved By,

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