

Interoffice Letter

To: SERVICE MANAGERS
DISTRICT MANAGERS
SERVICE ENGINEERS
TECHNICAL REPRESENTATIVES

Date: OCTOBER 30, 1986
From: MIKE DECHIARO
Office: CBS CRANFORD
Subject: 32MP SENSOR CROSSREFERENCE
F.E.R. - 86-11

The attached guide is being distributed to aide in machine troubleshooting. It is intended to help diagnose problems on machines without the E.S.P. panels. It could also be used on machines with the E.S.P. panels but it is, for the most part, unnecessary due to direct temperature readout that the panel gives you.

You will note that the voltage column/curve can be used to read machine temperatures while the machine is running. Before this temperature readings could only be read with the machine off (temperature values are read in resistance instead of voltage) as the operating and maintenance book states.

We have included a chart of precise voltage and resistance values as well as a graphical representation. It's a matter of preference as to which one is to be used. The Syracuse letter on the sensors gives a brief elaboration on testing.

If you have any questions, please feel free to call this office.

Regards,



Mike DeChiaro
MD:bg

Attachments

Date: 3/6/86 Subject: 3200MP SENSOR TROUBLESHOOTING Dept: CML ENGINEERING
Number: SMB86-28 Author: C.B. HOLMES

PURPOSE:

To transmit voltage drop information that will permit determining the temperature of any sensor while the machine is operating.

EQUIPMENT REQUIRED:

Digital Volt-OHM Meter

PROCEDURE:

The attached chart shows the relationship between (1) temperature, (2) sensor resistance, and (3) sensor voltage drop (volts DC - measured across an energized sensor).

The resistance Vs. temperature comparison is most useful when the 3200MP Controller cannot be energized or when checking sensor accuracy prior to installation.

The voltage drop Vs. temperature comparison can only be used when the sensor is energized. Voltage drop across any desired sensor can be measured while the machine is operating or for a particular sensor while performing the applicable controls test. Exercise care while measuring voltage to prevent damage to the sensor leads, the connector plugs and the processor board.

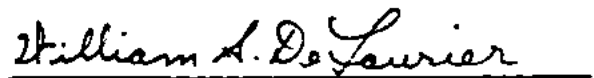
CHECKING SENSOR ACCURACY:

Sensor accuracy is checked by placing the sensor in a medium of known temperature, then comparing that temperature against the temperature that relates to the measured resistance or voltage drop. The thermometer used to determine the temperature of the test medium should be of laboratory quality with 0.5 degree Fahrenheit graduations. Sensor accuracy should be within 2 degrees Fahrenheit.

Prepared By:

Approved By:


C.B. Holmes


William S. DeLaurier

Mail Keys: 2.19, 2.30, 2.31, 2.32
CBH/ms
Attachment

TEMPERATURE PERFORMANCE
VOLTAGE VS. TEMPERATURE RESISTANCE VS. TEMPERATURE

