



National TAB

Testing, Adjusting, and Balancing Equipment



Function		Range	Minimum Accuracy	Instrument Information	Calibration Date	Date Due
AIR	AIR PRESSURE	0 in wg to 10 in wg	2% +/- 0.001 in wg	TSI EBT731 EBT732117009	9/7/2023	9/7/2024
	AIR VELOCITY INSTRUMENT	50 fpm to 3900 fpm	+/- 5 % +/- 7 fpm	TSI EBT731 EBT732117009	9/7/2023	9/7/2024
	DIRECT HOOD READING	100 cfm to 2000 cfm	+/- 5 % +/- 7 cfm	TSI EBT731 EBT732117009	9/7/2023	9/7/2024
TEMPERATURE	AIR METER	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/29/2023	9/29/2024
	AIR PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/29/2023	9/29/2024
	IMMERSION METER	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/29/2023	9/29/2024
	IMMERSION PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/29/2023	9/29/2024
	CONTACT METER	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/29/2023	9/29/2024
	CONTACT PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper SRH77A S/N 100516003	9/29/2023	9/29/2024
HUMIDITY	HUMIDITY PROBE	10 % RH to 90 % RH	3% of reading	Cooper SRH77A S/N 100516003	9/29/2023	9/29/2024
ELECTRICAL	VOLTAGE MEASUREMENT	0 VAC to 600 VAC	2 % reading +/- 5 digits	Klein Tools CL800 S/N 1220C-C1	9/29/2023	9/29/2024
	AMPERAGE MEASUREMENT	0 Amperes to 100 Amperes	2 % reading +/- 5 digits	Klein Tools CL800 S/N 1220C-C1	9/29/2023	9/29/2024
ROTATION	ROTATION MEASUREMENT	60 rpm to 5000 rpm	2 % reading 2 rpm	Shimpo DT 207Lp S/N D1690029R	9/29/2023	9/29/2024



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Report of Calibration

Kansas City Calibration Lab., Inc.
8847 Long Street
Lenexa, Kansas 66215

Telephone: (913) 541-0629 Internet: www.kccl.com Email: service@kccl.com

UNIT UNDER TEST: TSI EBT731 Differential Digital Meter	TEST RESULT: PASS
SERIAL NUMBER: EBT732117009	PERFORMED ON: 9/7/2023
ASSET NUMBER: EBT732117009	DATA TYPE: FOUND-LEFT
PROCEDURE NAME: ADM-XXX / EBT-XXX-XX 2.0% Reading: 1 Yr Cert CPC	TEMPERATURE: 23.8°C
PROCEDURE REV.: 20210930C	HUMIDITY: 44%
CALIBRATED BY: Bart Schwartz	BAROMETRIC: 28.93 inHg
P.O. NUMBER:	Recalibration Date
CUSTOMER: National TAB 1126 Swift Street NKC, MO 64116	September 07, 2024
Cal Seals Intact: Yes	Calibration Number: 0007333
	Previous Calibration Date: August 12, 2022

K.C. Calibration Lab., Inc. certifies that the above listed instrument meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). This calibration is traceable to the International System of Units (SI), through National Metrology Institutes (NIST, PTB NRC NPL, etc), radiometric techniques, or natural physical constants. This calibration complies with MIL-STD-45662A and ANSI/NCCL Z540-1-1994.

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Note: Any Test Uncertainty Ratio (TUR) that is less than four to one will appear under the "TUR" heading on the data record. If the TUR meets or exceeds four to one, the field is left blank.

REMARKS:

Asset#	Description	Cal Date	Due Date
41001AR6	Mensor CPC6050 Low & Medium Pressure Calibrator	3/15/2023	3/15/2024

Test Description	True Value	Test Result	Lower Limit	Upper Limit	Units	TUR
** Connector						
0.000 inH2O	0.000	-0.0005	-0.0100	0.0100	inH2O	Pass
5.000 inH2O	5.000	5.1000	4.9000	5.1000	inH2O	Pass
10.000 inH2O	10.000	10.0300	9.8000	10.2000	inH2O	Pass
14.900 inH2O	14.900	14.9100	14.6020	15.1980	inH2O	Pass
0.000 inH2O	0.000	-0.0003	-0.0100	0.0100	inH2O	Pass
-5.000 inH2O	-5.000	-5.0100	-5.1000	-4.9000	inH2O	Pass
-10.000 inH2O	-10.000	-10.0200	-10.2000	-9.8000	inH2O	Pass
-14.900 inH2O	-14.900	-14.9600	-15.1980	-14.6020	inH2O	Pass

Report of Calibration for SERIAL NUMBER: EBT732117009 ASSET NUMBER: EBT732117009
Printed On: Thursday, September 7, 2023 Page 1 of 2
Test Results indicate the following: Found-Left: Unit was left as found. As-Left: Unit was left after adjustments.

Test Description	True Value	Test Result	Lower Limit	Upper Limit	Units	TUR
** Connector						
0.000 inH2O	0.000	-0.0001	-0.0100	0.0100	inH2O	Pass
5.000 inH2O	5.000	4.9800	4.9000	5.1000	inH2O	Pass
10.000 inH2O	10.000	10.0300	9.8000	10.2000	inH2O	Pass
14.900 inH2O	14.900	14.9100	14.6020	15.1980	inH2O	Pass
0.000 inH2O	0.000	0.0001	-0.0100	0.0100	inH2O	Pass
-5.000 inH2O	-5.000	-5.0100	-5.1000	-4.9000	inH2O	Pass
-10.000 inH2O	-10.000	-10.0300	-10.2000	-9.8000	inH2O	Pass
-14.900 inH2O	-14.900	-14.9200	-15.1980	-14.6020	inH2O	Pass

*****END OF CALIBRATION*****

K.C. Calibration Labs Seal

Signature: Bart A. Schwartz, Engineer in Charge

Report of Calibration for SERIAL NUMBER: EBT732117009 ASSET NUMBER: EBT732117009
Printed On: Thursday, September 7, 2023 Page 2 of 2
Test Results indicate the following: Found-Left: Unit was left as found. As-Left: Unit was left after adjustments.

Report of Calibration

Kansas City Calibration Lab., Inc.
8847 Long Street
Lenexa, Kansas 66215

Telephone: (913) 541-0629 Internet: www.kccl.com Email: service@kccl.com

UNIT UNDER TEST: Shimpo DT-2077p Tachometer	TEST RESULT: PASS
SERIAL NUMBER: D1690029R	PERFORMED ON: 9/29/2023
ASSET NUMBER: D1690029R	DATA TYPE: FOUND-LEFT
PROCEDURE NAME: Shimpo DT-20xx: 1 Year Certification	TEMPERATURE: 24.9°C
PROCEDURE REV.: 20210818C	HUMIDITY: 47%
CALIBRATED BY: Bart Schwartz	
P.O. NUMBER:	Recalibration Date
CUSTOMER: National TAB 1126 Swift Street NKC, MO 64116	September 29, 2024
Cal Seals Intact: Yes	Calibration Number: 0007544
	Previous Calibration Date: August 11, 2022

K.C. Calibration Lab., Inc. certifies that the above listed instrument meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). This calibration is traceable to the International System of Units (SI), through National Metrology Institutes (NIST, PTB NRC NPL, etc), radiometric techniques, or natural physical constants. This calibration complies with MIL-STD-45662A and ANSI/NCCL Z540-1-1994.

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REMARKS:

Asset#	Description	Cal Date	Due Date
MYS900813	Keysight Technologies 33511B Function/Arb Waveform Generator	12/1/2022	12/1/2023

Test Description	True Value	Test Result	Lower Limit	Upper Limit	Units	TUR
RPM						
10.00 RPM	10.0	10	9	11	RPM	Pass
100.00 RPM	100.0	100	99	101	RPM	Pass
1000.0 RPM	1000.0	1000	999	1001	RPM	Pass
10,000.0 RPM	10000.0	10000	9998	10002	RPM	Pass
99,900.0 RPM	99900.0	99902	99893	99907	RPM	Pass

Report of Calibration for SERIAL NUMBER: D1690029R ASSET NUMBER: D1690029R
Printed On: Friday, September 29, 2023 Page 1 of 2
Test Results indicate the following: Found-Left: Unit was left as found. As-Left: Unit was left after adjustments.

Report of Calibration

Kansas City Calibration Lab., Inc.
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Lenexa, Kansas 66215

Telephone: (913) 541-0629 Internet: www.kccl.com Email: service@kccl.com

UNIT UNDER TEST: Cooper Instrument SRH77A Digital Thermometer	TEST RESULT: PASS
SERIAL NUMBER: 100516003	PERFORMED ON: 9/29/2023
ASSET NUMBER: 100516003	DATA TYPE: FOUND-LEFT
PROCEDURE NAME: Met Temp NIST(SI) 1 Year	TEMPERATURE: 24.1°C
PROCEDURE REV.:	HUMIDITY: 46%
CALIBRATED BY: Bart Schwartz	
P.O. NUMBER:	Recalibration Date
CUSTOMER: National TAB 1126 Swift Street NKC, MO 64116	September 29, 2024
Cal Seals Intact: Yes	Calibration Number: 00077543
	Previous Calibration Date: August 12, 2022

K.C. Calibration Lab., Inc. certifies that the above listed instrument meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). This calibration is traceable to the International System of Units (SI), through National Metrology Institutes (NIST, PTB NRC NPL, etc), radiometric techniques, or natural physical constants. This calibration complies with MIL-STD-45662A and ANSI/NCCL Z540-1-1994.

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REMARKS:

Asset#	Description	Cal Date	Due Date
2659119	Hart Scientific 1523 Single Chan Reference Thermometer	1/9/2023	1/9/2024
905040	Burns Engineering 5615 Platinum Resistance Thermometer	2/8/2023	2/8/2024
DWS18	Fluke 518 Dry-Block Calibrator	8/28/2023	8/28/2024
MB7103	Hart Scientific 7103 Micro Bath Calibrator	12/8/2022	12/8/2023

Test Description	True Value	Test Result	Lower Limit	Upper Limit	Units	TUR
1075 General Purpose Puncture Probe						
Accuracy ±1.3 deg F / ±0.2 deg C or ±0.5% or reading:						
-10.00	F	-10.08	-8.70	1.38		
32.00	F	32.34	32.70	0.36		
122.00	F	122.71	121.80	-0.91		
212.00	F	211.90	211.10	-0.80		
280.00	F	279.96	280.70	0.74		
4011 Pipe Strap Probe						
Accuracy ±2% Range -25° to 212°F / -32° to 100°C						
0.00	F	0.27	2.10	1.83		
75.00	F	75.25	75.10	-0.15		
150.00	F	150.31	150.00	-0.31		

Report of Calibration for SERIAL NUMBER: 100516003 ASSET NUMBER: 100516003
Printed On: Friday, September 29, 2023 Page 1 of 2
Test Results indicate the following: Found-Left: Unit was left as found. As-Left: Unit was left after adjustments.



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Test Description	True Value	Test Result	Lower Limit	Upper Limit	Units	TUR
5028 Slim Humidity Probe						
Accuracy ±2% from 20 to 80%RH, ±3% below 20 and ±						
10.0 %RH @ 23.0°C	%RH	10.0	16	6.0		
25.0 %RH @ 23.0°C	%RH	25.0	30	5.0		
50.0 %RH @ 23.0°C	%RH	50.0	53	3.0		
75.0 %RH @ 23.0°C	%RH	75.0	77	2.0		
23.0°C @ 10.0 %RH	C	23.0	23.2	0.2		
23.0°C @ 25.0 %RH	C	23.0	23.2	0.2		
23.0°C @ 50.0 %RH	C	23.0	23.2	0.2		
23.0°C @ 75.0 %RH	C	23.0	23.1	0.1		

*****END OF CALIBRATION*****

Signed: *Bart A. Schwartz*
Bart A. Schwartz, Engineer in Charge

Report of Calibration for SERIAL NUMBER: 100516003 ASSET NUMBER: 100516003 Page 2 of 2

Printed On: Friday, September 29, 2023
Test Results indicate the following: Found-Left: Unit was left as found. As-Left: Unit was left after adjustments.

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Kansas City Calibration Lab., Inc.

8847 Long Street
Lenexa, Kansas 66215

Telephone: (913) 541-0629 Internet: www.kccl.com Email: service@kccl.com

UNIT UNDER TEST: Klein Tools CL800 True RMS Digital Clampmeter	TEST RESULT: PASS
SERIAL NUMBER: 1220C-C1	PERFORMED ON: 9/29/2023
ASSET NUMBER: 1220C-C1	DATA TYPE: FOUND-LEFT
PROCEDURE NAME: Klein Tools CL800 : (1 year) CAL VER / 5520	TEMPERATURE: 24.9°C
PROCEDURE REV.: 20230928	HUMIDITY: 46%
CALIBRATED BY: Bart Schwartz	
P.O. NUMBER:	
CUSTOMER: National TAB 1126 Swift Street NKC, MO 64116	Recalibration Date September 29, 2024 Calibration Number: 0007542 Previous Calibration Date:

Cal Seals Intact: Unknown

K.C. Calibration Lab., Inc. certifies that the above listed instrument meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). This calibration is traceable to the International System of Units (SI), through National Metrology Institutes (NIST, PTB, NRC, NPL, etc), radiometric techniques, or natural physical constants. This calibration complies with MIL-STD-45662A and ANSI/NCSL Z540-1-1994.

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REMARKS:

Asset #	Description	Cal Date	Due Date
3277903	Fluke 5522A Multi-Product Calibrator	11/30/2022	11/30/2023

Test Description	True Value	Test Result	Lower Limit	Upper Limit	Units	TUR
Root Difference Square guardbanding method used						
AC VOLTS TESTS						
6 V Range						
5.900 V @ 60 Hz	5.9000	5.897	5.807	5.994	V	Pass
60 V Range						
59.00 V @ 60 Hz	59.0000	58.97	58.24	59.76	V	Pass
600 V Range						
590.0 V @ 60 Hz	590.000	589.7	582.4	597.6	V	Pass
1000 V Range						
990.0 V @ 60 Hz	990.000	991.0	970.1	1009.9	V	Pass
DC VOLTS TESTS						
600 mV Range						
600.0 mV	600.000	599.8	593.2	606.8	m V	Pass

Report of Calibration for SERIAL NUMBER: 1220C-C1 ASSET NUMBER: 1220C-C1

Printed On: Friday, September 29, 2023
Test Results indicate the following: Found-Left: Unit was left as found. As-Left: Unit was left after adjustments.

Test Description	True Value	Test Result	Lower Limit	Upper Limit	Units	TUR
-600.0 mV	-600.00	-599.9	-606.8	-593.2	m V	Pass
6 V Range						
6.000 V	6.0000	5.997	5.937	6.063	V	Pass
-6.000 V	-6.0000	-5.995	-6.063	-5.937	V	Pass
60 V Range						
60.00 V	60.0000	59.96	59.37	60.63	V	Pass
600 V Range						
600.0 V	600.0000	599.6	593.7	606.3	V	Pass
1000 V Range						
1000 V	1000.0	1001	985	1015	V	Pass
-1000 V	-1000.0	-1001	-1015	-985	V	Pass
CONTINUITY TESTS						
Audible Indicator ON @ 10 ohms						
Audible Indicator OFF @ 51 ohms						
RESISTANCE TESTS						
600 Ohm Range						
600.0 Ohm	600.00	601.2	590.5	609.5	Ω	Pass
6 kOhm Range						
6.000 kOhm	6.00000	6.000	5.905	6.095	k Ω	Pass
60 kOhm Range						
60.00 kOhm	60.0000	59.99	59.05	60.95	k Ω	Pass
600 kOhm Range						
600.0 kOhm	600.0000	599.9	590.5	609.5	k Ω	Pass
6 MOhm Range						
6.000 MOhm	6.00000	5.993	5.905	6.095	M Ω	Pass
60 MOhm Range						
60.00 MOhm	60.00000	59.47	58.70	61.30	M Ω	Pass
DIODE CHECK TESTS						
Diode Voltage						
FREQUENCY TESTS						
9.00 Hz @ 8 V						
9.00 Hz @ 8 V	9.0000	8.999	8.905	9.095	Hz	Pass
90.00 Hz @ 8 V						
90.00 Hz @ 8 V	90.0000	90.00	89.05	90.95	Hz	Pass
900.0 Hz @ 8 V						
900.0 Hz @ 8 V	900.0000	900.0	890.5	909.5	Hz	Pass
9.000 kHz @ 8 V						
9.000 kHz @ 8 V	9.00000	9.000	8.905	9.095	k Hz	Pass
90.00 kHz @ 8 V						
90.00 kHz @ 8 V	90.00000	90.00	89.05	90.95	k Hz	Pass
100.0 kHz @ 8 V						
100.0 kHz @ 8 V	100.00000	100.00	98.5	101.5	k Hz	Pass
DUTY CYCLE						
50.0 % @ 1 kHz						
50.0 % @ 1 kHz	50.00	50.3	49.3	50.8	%	Pass
CAPACITANCE TESTS						
60 nF Range						
59.00 nF	59.0000	59.96	55.70	62.30	n F	Pass
600 nF Range						
590.0 nF	590.0000	597.1	571.8	608.2	n F	Pass
6 uF Range						
5.900 uF	5.90000	5.854	5.718	6.082	u F	Pass
60 uF Range						
59.00 uF	59.00000	58.87	57.18	60.82	u F	Pass

Report of Calibration for SERIAL NUMBER: 1220C-C1 ASSET NUMBER: 1220C-C1

Printed On: Friday, September 29, 2023
Test Results indicate the following: Found-Left: Unit was left as found. As-Left: Unit was left after adjustments.

Test Description	True Value	Test Result	Lower Limit	Upper Limit	Units	TUR
6000 uF Range						
5900 uF	5900.00	590.6	560.0	620.0	u F	Pass
TEMPERATURE F TESTS						
5900 uF						
5900 uF	5900.00	5957	5600	6200	u F	Pass
-14 °F						
-14 °F	-14.0	-10	-23	-5	°F	Pass
100 °F						
100 °F	100.0	102	94	106	°F	Pass
500 °F						
500 °F	500.0	502	490	510	°F	Pass
900 °F						
900 °F	900.0	902	873	927	°F	Pass
TEMPERATURE C TESTS						
-25 °C						
-25 °C	-25.0	-23	-31	-20	°C	Pass
100 °C						
100 °C	100.0	102	96	104	°C	Pass
350 °C						
350 °C	350.0	351	344	357	°C	Pass
500 °C						
500 °C	500.0	501	485	515	°C	Pass
AC CURRENT TESTS						
60 A Range						
50.00 A @ 60 Hz	50.0000	49.60	48.92	51.08	A	Pass
50.00 A @ 400 Hz	50.0000	50.00	48.92	51.08	A	Pass
400 A Range						
500.0 A @ 60 Hz	500.0000	494.2	489.5	510.5	A	Pass
500.0 A @ 100 Hz	500.0000	494.4	489.5	510.5	A	Pass
60 A Range						
59.00 A	59.0000	49.20	48.92	51.08	A	Pass
600 A Range						
300.0 A	300.0000	296.5	293.5	306.5	A	Pass
590.0 A	590.0000	582.7	577.7	602.3	A	Pass

*****END OF CALIBRATION*****

Signed: *Bart A. Schwartz*
Bart A. Schwartz, Engineer in Charge

Report of Calibration for SERIAL NUMBER: 1220C-C1 ASSET NUMBER: 1220C-C1

Printed On: Friday, September 29, 2023
Test Results indicate the following: Found-Left: Unit was left as found. As-Left: Unit was left after adjustments.