

MODEL NO.: AT-205P			WI-ENG-529		
title: DCA calibration			NO		
3	A	0	2003/11/22	2	

				instruction:			
						1 set to range DCuA use a standard calibrator to input 100uA, it's normal that LCD displays: 99.2 100.8uA.	
						2 input 1000uA, it's normal that LCD display 988 1012uA.	
3 set to range DCmA input 10.0mA it's normal that LCD displays: 9.88 10.12mA.							
4 set to range DCmA input 100mA it's normal that LCD displays: 98.8 101.2mA.							
5 set to range DCA, input 1A it's normal that LCD displays: 0.985 1.015A.							

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NO				NO		
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MODEL NO.: AT-205P			WI-ENG-529		
title: ACA test			NO		
4	A	0	1		
			2003/11/22	2	

instruction:

1 set to uA, press MODE BUTTON to enter AC function, LCD display AC, use a standard unit to input 100uA 60Hz , normal value displayed on LCD should be: AC 98.8 101.2uA;

2 set to range ACuA, input 1000uA 60Hz , normal value displayed on LCD should be: AC 985 1015uA;

3 set to range mA, press MODE button, input 10.0mA 60Hz normal value displayed on LCD should be: AC 9.85 10.15mA ;

4 set to range ACmA, input 100mA 60Hz normal value displayed on LCD should be: AC 98.5 101.5mA ;

5 set to range A, press MODE button, input 1A 60Hz normal value displayed on LCD should be: AC 0.980 1.020A.

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MODEL NO.: AT-205P			WI-ENG-529			
title: capacitance (CAP) test					NO	
					1	
5	A	0	2003/11/22		2	

Instructions:
 benchmark adjustor: VR2, calibration point: 97.6nF

set to range Ω , press MODE button to enter range CAP, LCD display AUTO & nF icons, input 97.6nF, adjust VR2 until LCD display: 97.5 97.7nF;

range	calibration point	normal value
400nF	97.6nF	97.5 97.7nF
40nF	10.06nF	9.66 10.46nF
4uF	0.99uF	0.960 1.020uF
40uF	9.86uF	9.564 10.16uF
100uF	47uF	45.1 48.8uF

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adjustor VR2

NO			
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MODEL NO.: AT-205P

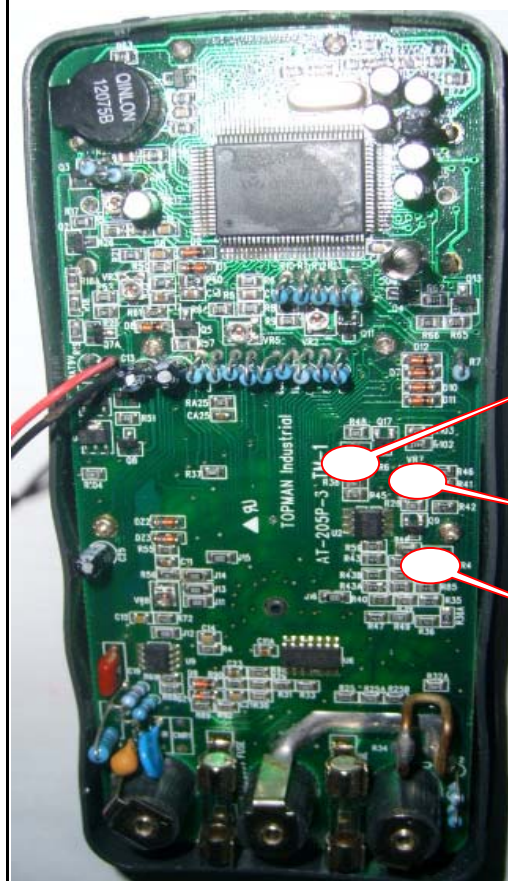
WI-ENG-529

title: / full range and linearity calibration

6

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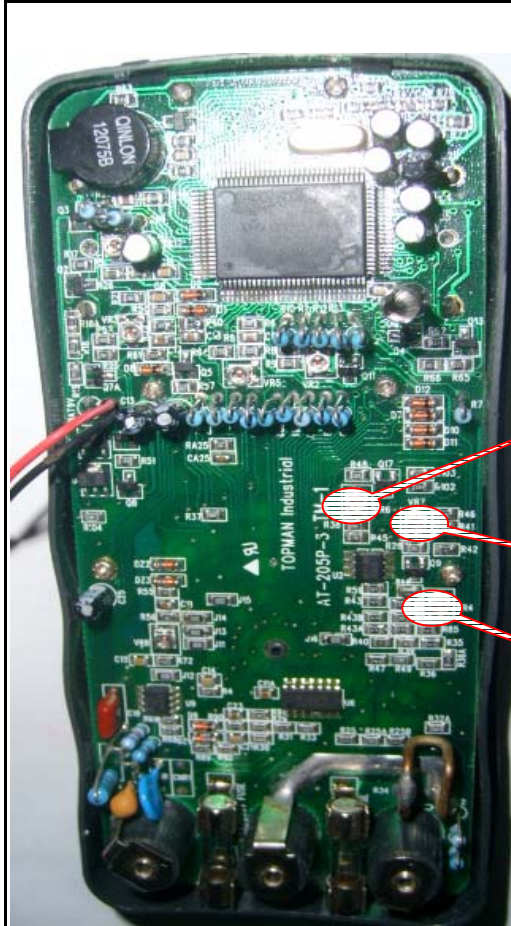
adjustor VR6

adjustor VR7

adjustor VR4

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NO					5101B
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MOD				WI-ENG-529
title: /				NO
				1
6	2003/11/22	2		



instruction:

1 calibration: place the unit in constant temperature room for more than 4 hours;

A temperature compensation calibration---adjustor: VR4, calibration point: room temperature set to range , use a standard unit (model: 5101B) to input 0mV, adjust VR4, until LCD display: room temperature ± 1

B full range calibration--- input DC 31.124mV, adjust VR6 until LCD display: 750 + room temperature ± 1 ;

C linearity calibration:

input DC 4.095mV, normal value displayed on LCD should be: 100 + room temperature ± 1

2 calibration:

A set to range , input 0mV, adjust VR7, until LCD display: room temperature ± 1 , and at the same time, it should be corresponding to temperature, eg: when it's 25 , should be 77

B full range calibration:

input DC 31.124mV, LCD display: 1350 + room temperature () ± 10

C linearity calibration:

input DC 4.095mV, LCD display: 180 + room temperature () ± 2

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NO					5101B
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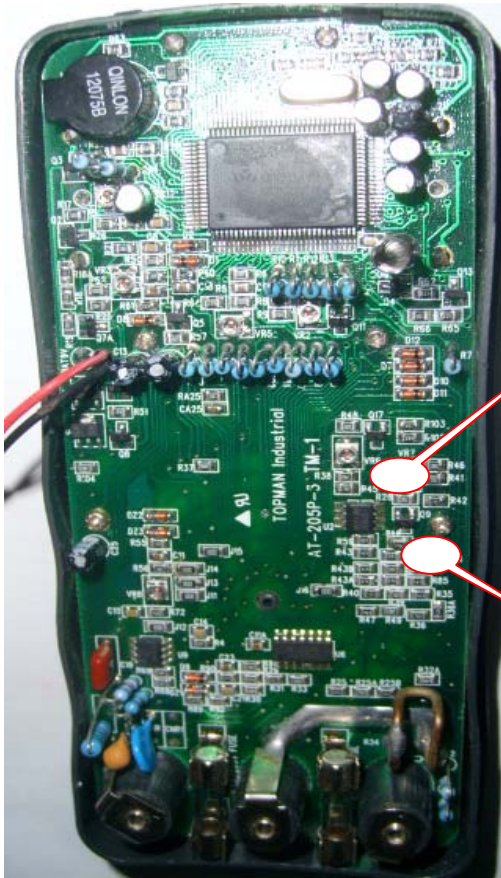
MODEL NO.: AT-205P

title: temperature compensation calibration(/)

7

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adjustor R7

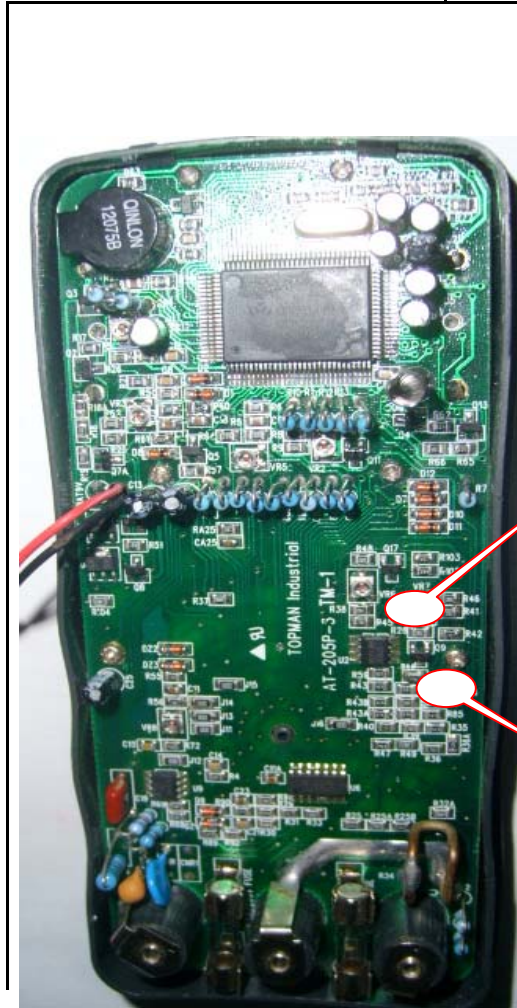
adjustor VR4

NO

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MOI				WI-ENG-529		
title: te				NO		
				1		
	2003/11/22			2		



instructions:

1 place the meter in a constant temperature room for more than 4hours;


2 set to range insert the temp. probe, adjust VR4, until LCD

display same value as the standard unit displayed, said it's room temperature; adjust VR4

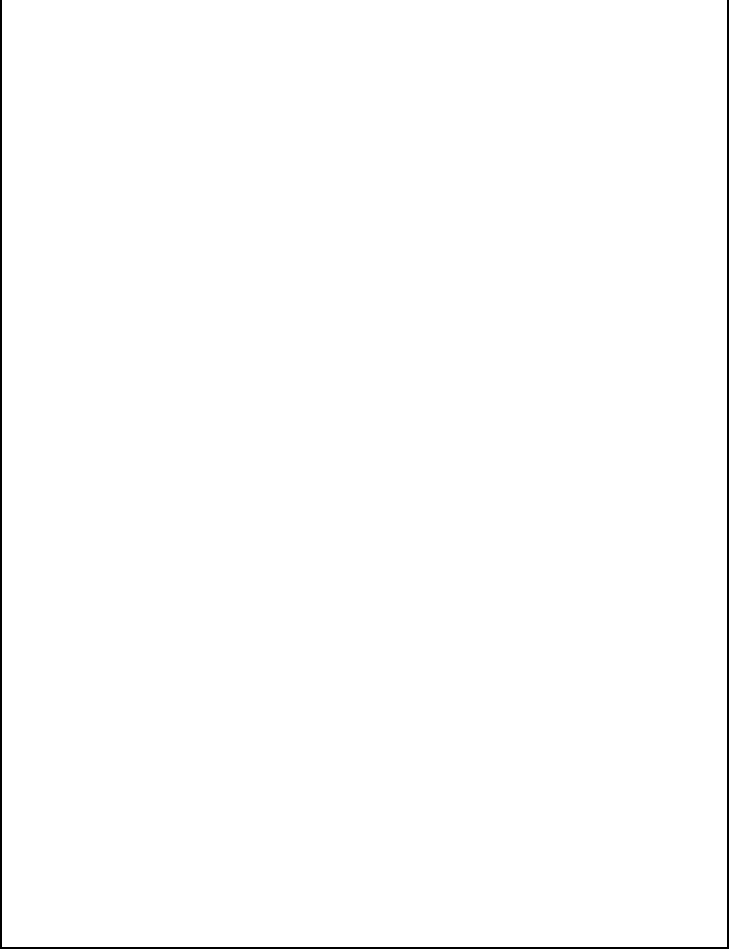
until lower right LCD display same temperature as the standard unit displayed;

3 set to range , adjust VR7 until LCD display same value as

standard unit displays, and should be corresponding to temperature, eg: if at 25 , should be 77 .

					
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NO					
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MODEL NO.: AT					WI-ENG-529	
title: resistance test					NO	
					1	
8	A	2003/11/22			2	



instructions:

1 set to range Ω

range:	calibration point:	normal value:
400 Ω	100 Ω	99.2 100.8 Ω
4k Ω	1.000k Ω	0.992 1.008k Ω
40k Ω	10.00k Ω	9.92 10.08k Ω
400k Ω	100.0k Ω	99.2 100.8k Ω
4M Ω	1.000M Ω	0.992 1.008M Ω
40M Ω	10.00M Ω	9.85 10.15M Ω

2 diode, buzzer calibration:

press MODE button to enter diode function, LCD displays Diode, V & OL icons

A diode calibration: LCD display diode positive voltage, display OL if reverse.

B buzzer calibration: press MODE button to enter buzzer range,

when connected resistance less than 50 Ω , buzzer sound.

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NO						
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MODEL NO.: AT-205P			WI-ENG-529			
title: Frequency, %duty test			NO			
			1			
9	A	0	2003/11/22		2	

instruction:

set to frequency %duty range

A frequency test

range:	calibration point:	normal value:
9.999Hz	9.999Hz	9.869 10.13Hz
99.99Hz	99.99Hz	98.69 101.3Hz
999.9Hz	999.9Hz	989.9Hz 1.010kHz
9.999kHz	9.999kHz	9.899 10.10kHz
99.99kHz	99.99kHz	98.99 101.0kHz
999.9kHz	999.9kHz	989.9kHz 1.010MHz
9.999MHz	9.999MHz	9.899 10.10MHz

B %duty test:

press Hz/% button to enter % range, input 1kHz, LCD displays:49.6 50.4%

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MODEL NO.: AT-205P			WI-ENG-5	
title: DWELL test			NO	
10	A	0	2003/11/22	2



adjustor VR5

instruction:

set to range DWELL 2CYL range adjust VR5 until LCD

display 179.9 180.1, then use a standard calibrator to input 10V(50Hz) s

LCD displays 88.7 91.3;

range:	calibration point:	normal value:
2CYL	180	179.9 180.1
3CYL	120	119.0~121.0
4CYL	90.0	89.0 91.0
5CYL	72.0	71.0 73.0
6CYL	60.0	59.1 60.9
8CYL	45.0	44.5 45.5
10CYL	36	35.6~36.4

NO					
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MODEL				WI-ENG-528		
title: DWI				NO		
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				2		



instruction:

set to range DWELL 2CYL range adjust VR5 until LCD

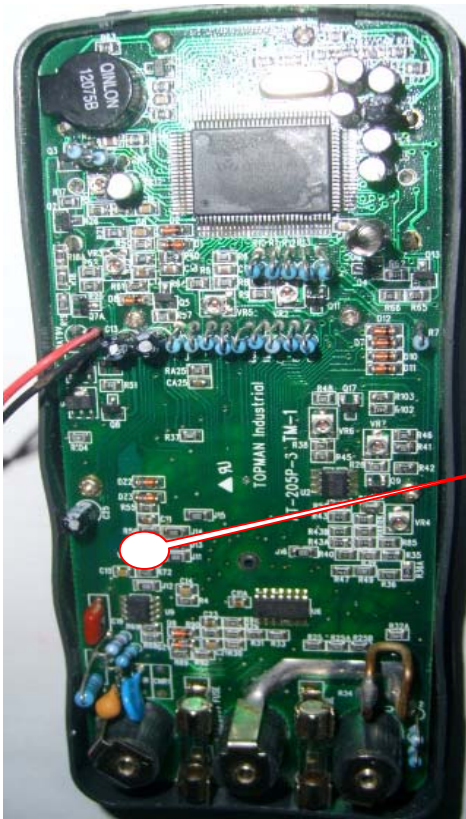
display 179.9 180.1, then use a standard calibrator to input 10V(50Hz) signal,

LCD displays 88.7 91.3;

range:	calibration point:	normal value:
2CYL	180	179.9 180.1
3CYL	120	119.0~121.0
4CYL	90.0	89.0 91.0
5CYL	72.0	71.0 73.0
6CYL	60.0	59.1 60.9
8CYL	45.0	44.5 45.5
10CYL	36	35.6~36.4

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NO					
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MODEL NO.: AT-205P			WI-ENG-529		
title: RPM test			NO		
11	A	0	2003/11/22	2	



adjustor VR8

instruction:

1 set to range RPM use a standard clibrator to input 10Hz signal, adjust VR8 until LCD displays 1200RPM±2RPM

2 set to ×10RPM input AC100Hz signal

1200RPM±10RPM should be displayed on LCD.

range:	calibration point:	normal value:
RPM	1200	1198~1202
×10RPM	1200	1190~1210
DIS RPM	600	592~608
DIS×10 RPM	600	592~608

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NO						
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3						

MODEL NO.: AT-205P			WI-ENG-529			
title: Hold & relative calibration			NO			
			1			
13	A	0	2003/11/22		2	

			instructions:			
			<p>1 data hold function: during measurement, press Hold button, data on LCD can be hold.</p> <p>2 relative calibration: at the same range, measure for a 1st value, press ReL button, then test for 2nd time, the difference between these two measurements will be displayed.</p> <p>3 backlight test: press HOLD button for about 2s, backlight will light up. press the button again for about 2s, backlight will be turned off.</p> <p>4 APO test: set the functional switch to a same range for about 30min, the unit will be power off automatically.</p> <p>5 Battery icon test: when the battery voltage is lower than 7.5V, BAT icon will be displayed.</p>			
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NO						
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MODEL NO.: AT-205P			WI-ENG-529			
title: high voltage test			NO			
			1			
14	A	0	2003/11/22	2		
			instructions:			
			<p>1 DCV/ACV input port DC1000V/AC600V high voltage test:</p> <p>2 housing insulation 5000V endurance test:</p> <p>A set the Voltage Endurance/Insulation Resistance tester current into 0.5mA, time is 5s;</p> <p>B connect the units' input port to COM, then connect Voltage Endurance/Insulation Resistance tester to ground;</p> <p>C high voltage output set to 5000V, then use a high voltage stick to contact the outside metal on the housing, no strike fire and broken happened are good.</p> <p>Safety adverted during operation!</p> <p>3 after voltage endurance test, all the units should be full calibrated.</p>			