

TOOL USE INSTRUCTION

RIVIAN

TOOL NUMBER TSN00033-100

TITLE RESISTANCE METER

REV - DATE REV 1 - 9/29/2026

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TOOL FUNCTION

RESISTANCE TESTING OF CONDUCTIVE JOINTS



9/29/26 REV 1

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OVERVIEW

SPECIFICATIONS

RATED VOLTAGE: 5 VA MAX.

OPERATING TEMPERATURE: 0°C TO 40°C

DIMENSIONS: 199 W X 132 H X 60.6 D

WEIGHT: 890 G

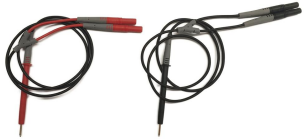
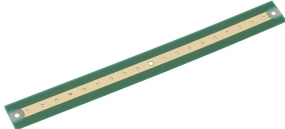
INCLUDED ACCESSORIES

MANUFACTURER + PART NUMBER	DESCRIPTION	IMAGE
HIOKI L2101	CLIP TYPE LEAD	
HIOKI Z2002	TEMPERATURE SENSOR	
HIOKI Z5041	PROTECTOR	
HIOKI F2AH250V	SPARE FUSE (2 AMP, 250V)	



OVERVIEW

ADDITIONAL ACCESSORIES (SOLD SEPARATELY)

TOOL P/N	DESCRIPTION	STATUS	IMAGE
TSN00034-100	RESISTANCE METER TEST PROBES (PIN TYPE)	OBSOLETE	
TSN01623-300	LOW PROFILE TEST LEAD SET - RESISTANCE METER (PIN TYPE)	ACTIVE	
TSN01758-100	ZERO ADJUSTMENT BOARD - RESISTANCE METER	ACTIVE	



**WARNING**

Do not perform procedure if tool is damaged or missing parts. Consult the Rivian Service Tool Catalog for replacement components.

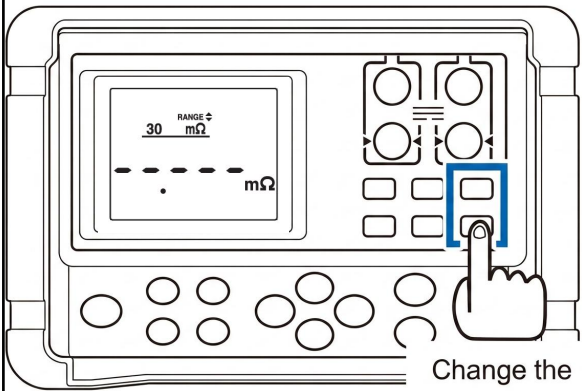
Failure to follow guidelines outlined in this document could result in injury and/or property damage.

SAFETY GUIDELINES

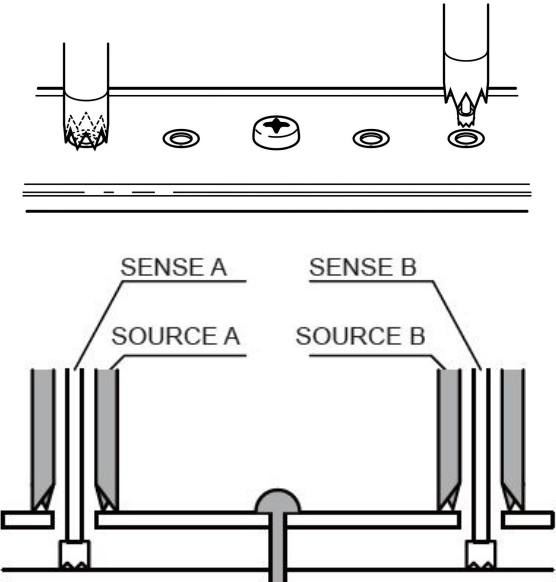
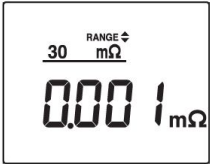
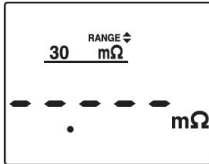
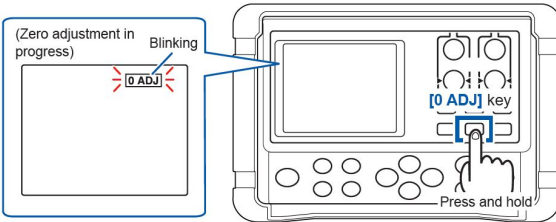
Do not use tool outside of manufacturer's recommendation

1	PPE Required • Eye Protection, Gloves, Closed Toe Shoes • ASTM class 0 electrical-protection gloves with leather protectors must be worn when working near any exposed high voltage conductor. • Before beginning work, test electrical-protection gloves for air leakage and visually inspect them for damage. Repeat the air test and inspection immediately following any incident that can reasonably be suspected of causing damage.	
2	DANGER: • Mishandling during use could result in injury or death, as well as damage to the instrument. Be certain that you understand the instructions and precautions in the manual before use.	
3	WARNING: • With regard to the electricity supply, there are risks of electric shock, heat generation, fire, and arc discharge due to short circuits. If persons unfamiliar with electricity measuring instruments are to use the instrument, another person familiar with such instruments must supervise operations.	

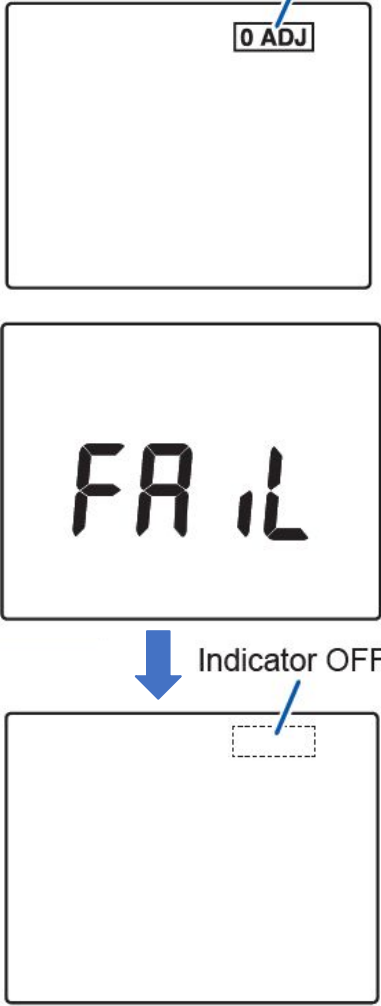
PIN TYPE CALIBRATION

Step	Directions	Visual Aid
1	Probes supplied with a protective cap. Please remove before usage and replace after usage.	
2	Install the pin style leads with the triangle marker to the "Sense" terminals on the Hioki Resistance Meter	
3	Power on the Hioki Resistance Meter and allow a few minutes for it to thermally stabilize.	
4	Use the up arrow and down arrow buttons to set the Hioki Resistance Meter to the 30 mΩ range.	 Change the range ([▲][▼] keys)



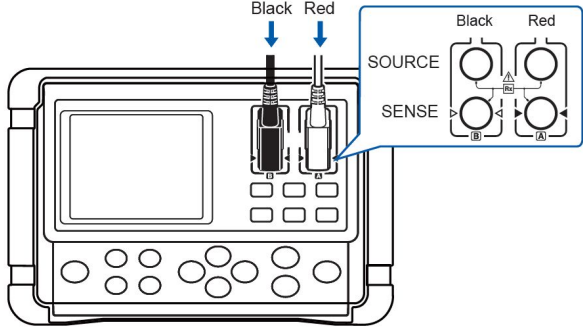
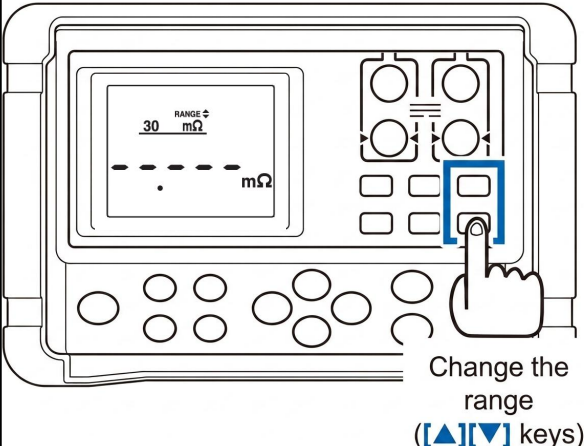
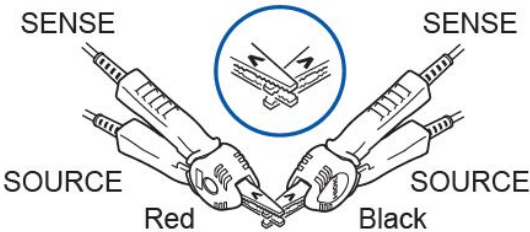
Step	Directions	Visual Aid
5	Touch the PIN TYPE TEST LEAD to the indentations next to the center fastener on the ZERO ADJUSTMENT BOARD, TSN01758-100 ⚠ NOTE: Hold the PIN TEST LEAD SET perpendicular for the most accurate reading.	
6	Confirm that the measured value is within $\pm 3\%$ f.s. ⚠ NOTE: If no measured value is displayed, make sure that the test leads are connected correctly.	If the connection is correct  If the connection is wrong 
7	Press and hold the [0 ADJ] key to perform zero adjustment. ⚠ NOTE: If it is difficult to press the key as the Zero Adjustment Board is used, press the [0 ADJ] key before shorting the measurement lead. Zero adjustment is automatically performed after the measured value is stabilized.	

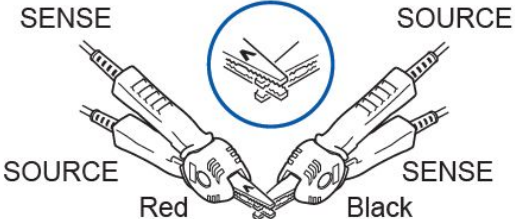
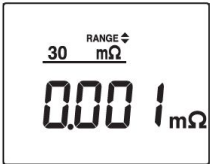
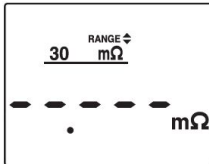
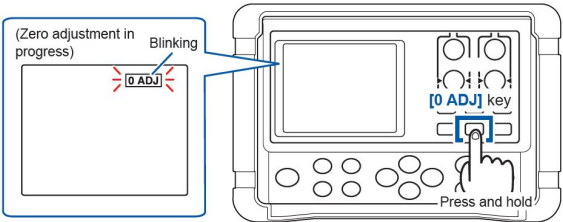
PIN TYPE CALIBRATION

Step	Directions	Visual Aid
8	After zero adjustment has succeeded the buzzer sounds and the measurement screen appears. ⚠ NOTE: After zero adjustment has failed the buzzer sounds and “FAiL” appears. The measurement screen then appears. If this happens check the probe tips, the leads, and the connection to the Hioki Resistance Meter, and repeat from the previous step.	Indicator ON  Indicator OFF
9	Remove the PIN STYLE TEST LEAD SET from the ZERO RESISTANCE BOARD. ⚠ NOTE: Do not change the range. Otherwise, the Hioki Resistance Meter must be adjusted again.	
10	The Hioki Resistance Meter is now ready to measure resistance. Return to the procedure that required the zero adjust to be performed.	

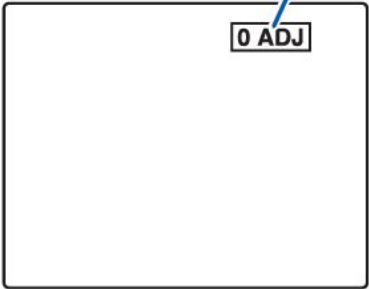


CLIP TYPE CALIBRATION

Step	Directions	Visual Aid
1	Connect the CLIP TYPE LEADS to the instrument. Connect the four terminals: SOURCE (A and B) and SENSE (A and B).	
2	Power on the Hioki Resistance Meter and allow a few minutes for it to thermally stabilize.	
3	Use the up arrow and down arrow buttons to set Hioki Resistance Meter to the 30 mΩ range.	
4A	Align the V symbols on the clips	Correct Align the V symbols on the clips. 

Step	Directions	Visual Aid
4B	⚠ NOTE: Make sure the V symbols are aligned.	Incorrect 
5	Confirm that the measured value is within $\pm 3\%$ f.s. ⚠ NOTE: If no measured value is displayed, make sure that the test leads are connected correctly.	If the connection is correct  If the connection is wrong 
6	Press and hold the [0 ADJ] key to perform zero adjustment. ⚠ NOTE: If it is difficult to press the key as the Zero Adjustment Board is used, press the [0 ADJ] key before shorting the measurement lead. Zero adjustment is automatically performed after the measured value is stabilized.	

CLIP TYPE CALIBRATION

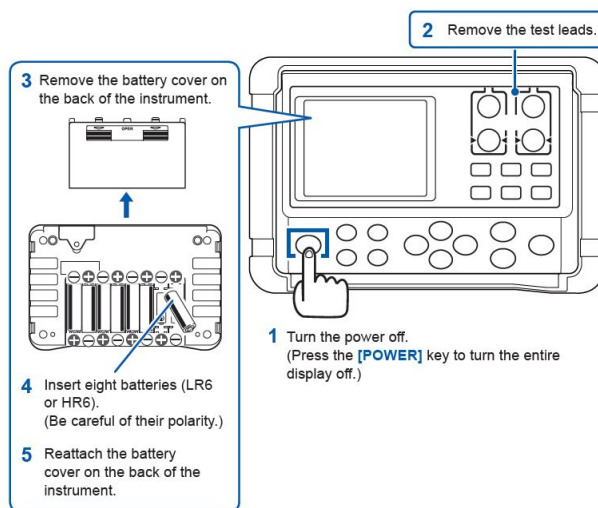
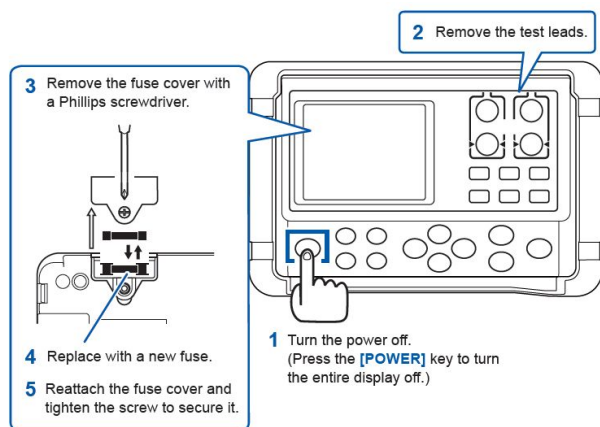
Step	Directions	Visual Aid
7	After zero adjustment has succeeded the buzzer sounds and the measurement screen appears. ⚠ NOTE: After zero adjustment has failed the buzzer sounds and “FAiL” appears. The measurement screen then appears. If this happens check the probe tips, the leads, and the connection to the Hioki Resistance Meter, and repeat from the previous step.	Indicator ON   Indicator OFF 
8	Unclip the leads from each other.. ⚠ NOTE: Do not change the range. Otherwise, the Hioki Resistance Meter must be adjusted again.	
9	The Hioki Resistance Meter is now ready to measure resistance. Return to the procedure that required the zero adjust to be performed.	



TASK	FREQUENCY
Inspect the test leads regularly for any signs of wear, cracks, or damage to the insulation.	Before and after every use
Check for loose or damaged connectors. If any damage is found, replace the tool with a new one.	Before and after every use
Install protective caps over probe tips.	After every use

The SOURCE terminals are protected with a fuse. If the fuse is broken, “FUSE” appears, and resistance cannot be measured. In such a case, use the diagram below to replace the fuse.

When the battery indicator becomes low, replace the batteries as soon as possible. When battery indicator is blinking, the battery becomes too low for measurement. In such a case, use the diagram below to replace the batteries.



TROUBLESHOOTING

For troubleshooting issues see the Manufacturer’s User Manual.



SERVICE & REPLACEMENT COMPONENTS

FOR OTHER ITEMS NOT SHOWN, CONTACT RIVIAN SERVICE TOOL ENGINEERING

TOOL P/N	MANUFACTURER + PART NUMBER	DESCRIPTION	IMAGE
N/A	Mouser: 576-0216002.MXP	SPARE FUSE (2 AMP, 250V Ø5 × 20 mm)	
TSN01623-200	CAL TEST CT4541-100-2	LOW PROFILE TEST LEAD, RED (Note: No tip replacement available.)	
TSN01623-201	CAL TEST CT4541-100-0	LOW PROFILE TEST LEAD, BLACK (Note: No tip replacement available.)	





DANGER

Risk of electrocution or electric shock



WARNING

Risk of minor injury



DANGER

Risk of major injury such as

- fire
- chemical or poison
- crushing / maiming
- death



CAUTION

Risk of

- damage to vehicle or property
- data disruption
- voiding warranty

IMPORTANT

Instructions to successfully complete a task

NOTE

Useful information

REVISION LOG

REV	DATE	CHANGE DESCRIPTION
1	9/29/26	Initial release

