

*Tuning-fork Analytical Balance*  
***HTR Series***

---

---

***Service Manual***

---

---



(subject to technical modification)

Ver. 1.0

## CONTENTS

<b>Chapter 1</b>	<b>Total View</b> .....	1
<b>Chapter 2</b>	<b>Electric/Electronic Construction</b> .....	2
	2-1 Block Diagram .....	2
	2-2 Whole Wiring .....	3
<b>Chapter 3</b>	<b>Troubleshooting</b> .....	4
	3-1 Troubleshooting Procedure .....	4
	3-2 Troubleshooting Table .....	5
	3-3 Primary Check .....	7
	3-4 Check of Electric/Electronic Parts .....	8
<b>Chapter 4</b>	<b>Adjustment and Setting</b> .....	10
	4-1 Span Calibration .....	10
	4-2 Corner Error Adjustment .....	12
	4-3 Address Data Check and Re-setting .....	13
	4-4 Linearity Adjustment .....	15
	4-5 Adjustment of Over-load Stopper .....	17
<b>Chapter 5</b>	<b>Parts Replacement</b> .....	18
	5-1 How to Remove the Case .....	18
	5-2 Sequence of HT-DP board replacement .....	19
	5-3 Sequence of Mechanical Unit Replacement .....	21
	5-4 Sequence of Tuning-fork sensor Replacement .....	24
<b>Appendix</b> .....		25
	The Table of Recommended Minimum Criteria for Adjustment	
	Repair Tool List	

This is a “Table of Contents preview” for quality assurance

The full manual can be purchased from our store:

<https://the-checkout-tech.com/manuals/shinko-denshi/HT-80 HT-120 HT-220 service ma>

And our free Online Keysheet maker:

<https://the-checkout-tech.com/Cash-Register-Keysheet-Creator/>

[HTTPS://THE-CHECKOUT-TECH.COM](https://THE-CHECKOUT-TECH.COM)