



SERVICE MANUAL

SD Series Scales



TABLE OF CONTENTS

	Page No.
CHAPTER 1 GETTING STARTED	
1.1 Introduction	1-1
1.2 Service Facilities	1-1
1.3 Tools and Test Equipment Required	1-2
1.4 Specifications.....	1-2
1.5 Operation.....	1-3
1.5.1 Power Supply	1-3
1.5.2 Overview of the Controls	1-3
1.5.3 Basic Functions	1-4
1.5.4 Dynamic Weighing	1-4
1.6 Calibration.....	1-5
CHAPTER 2 TROUBLESHOOTING	
2.1 Introduction	2-1
2.2 Visual Inspection.....	2-1
2.3 Diagnostic Guide	2-2
2.3.1 Diagnosis.....	2-2
2.4 Checking the Load Cell's Signal	2-4
2.4.1 Output Voltage Test	2-4
2.4.2 Resistance Test.....	2-5
2.4.3 Testing the Printed Circuit Board (PCB).....	2-6
CHAPTER 3 MAINTENANCE PROCEDURES	
3.1 Preventive Maintenance	3-1
3.1.1 Preventive Maintenance Checklist	3-1
3.2 Replacement of Major Components	3-1
3.2.1 Main Printed Circuit Board (PCB) Replacement.....	3-2
3.2.2 Battery Replacement.....	3-3
3.2.3 Function Label Replacement.....	3-3
CHAPTER 4 TESTING	
4.1 Testing	4-1
4.2 Power Test.....	4-1
4.3 Performance Tests Using a Scale Base	4-1
4.3.1 Overload/Underload Test	4-2
4.4 Performance Tests Using a Load Cell Simulator.....	4-3
4.5 Calibration Retention Test	4-3
4.6 Repeatability Test.....	4-3
4.7 Off-Center Load Test	4-5
4.8 Linearity Test	4-6
CHAPTER 5 PARTS LISTS & DIAGRAMS	
5-1 SD Series Scale: Small Model.....	5-3
5-2 SD Series Scale: Large Model.....	5-5

TABLE OF CONTENTS

LIST OF TABLES

TABLE NO.	TITLE	Page No.
1-1	Specifications	1-2
2-1	Diagnostic Guide Table	2-3
2-2	Color Code For Load Cell Wiring	2-4
2-3	Load Cell Output Readings (in mV with 3V Excitation)	2-5
2-4	Load Cell Resistance Readings (in Ohms)	2-5
4-1	Repeatability Worksheet	4-4
4-2	Linearity Test Masses	4-7
5-1	SD Series Scale: Small Model	5-3
5-2	SD Series Scale: Large Model	5-5

LIST OF ILLUSTRATIONS

FIGURE NO.	TITLE	Page No.
1-1	Catapult 1000 Display	1-3
2-1	Visual Checking Procedures	2-1
2-2	Catapult 1000 PCB connections	2-4
3-1	Load Cell leads are soldered to the Printed Circuit Board	3-2
3-2	Open Battery Compartment door by pressing the inset latch lever.....	3-3
5-1	SD Series Scale: Small Model	5-2
5-2	SD Series Scale: Large Model	5-4

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/ohaus/SD Shipping Scale service manual.html](https://the-checkout-tech.com/manuals/ohaus/SD%20Shipping%20Scale%20service%20manual.html)

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)