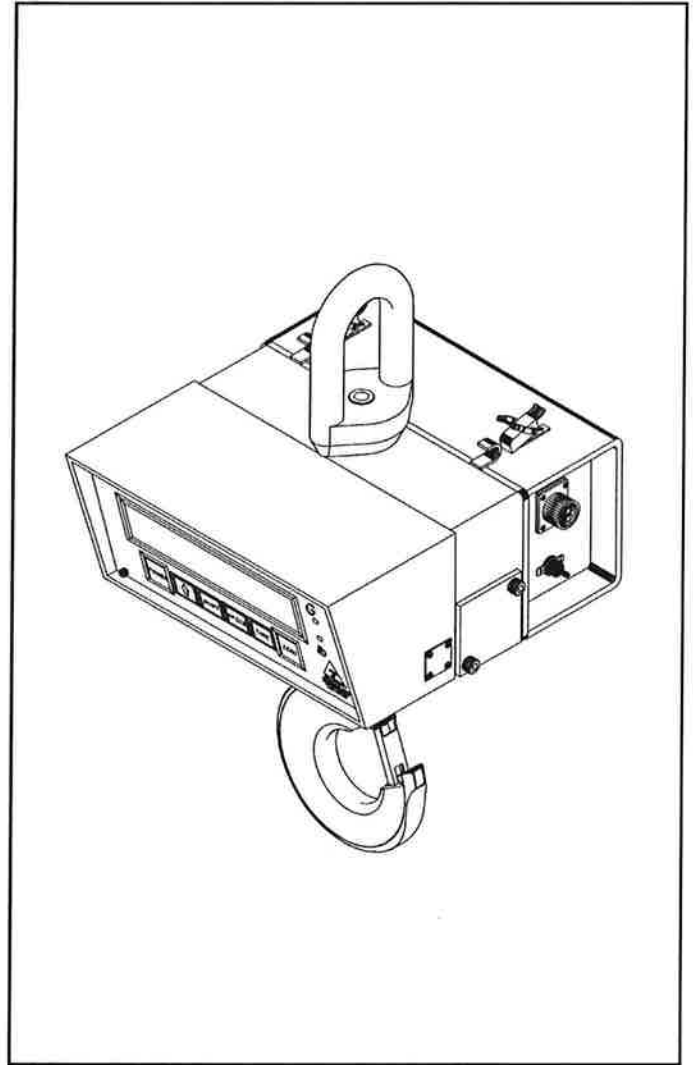


**ALLEGANY  
TECHNOLOGY**  
INCORPORATED

INSTALLATION  
AND  
OPERATIONS  
MANUAL



**CHECKMATE™  
CRANE SCALES**  
INCLUDING WIRELESS LINK OPTION

**SI/ALLEGANY**  
11400 PPG ROAD  
CUMBERLAND, MD 21502 USA  
(301) 722-6000  
FAX – (301) 722-7346  
[WWW.WEIGHINGSOLUTIONS.COM](http://WWW.WEIGHINGSOLUTIONS.COM)

# INTRODUCTION

## *Welcome*

Congratulations on your purchase of an Allegany Technology, Incorporated crane scale. For almost half a century Allegany Technology has been a pioneer in force measurement, supplying load cells and weighing scales to companies throughout the world who require high-quality, low-maintenance weighing equipment. Your crane scale's design and construction have evolved over decades of industrial experience, to give you years of smooth, trouble-free operation.

This manual applies to the CHECKMATE™ series of crane scales, both with and without the Wireless Link option. These models are similar in design and operation, the primary difference being that the Wireless Link-equipped models can transmit and display weight data long distances, and can send the data to remote devices, such as printers or computers. Operating differences between these models are minor, and are explained clearly in the text.

This manual is an important part of your Allegany Technology crane scale. In addition to providing detailed operating instructions, it provides guidance on operator safety, installation, maintenance, trouble shooting, etc. To make it easy to locate the information you need, we've included a detailed Table of Contents in the front of the manual. All of this is important information, so be sure to keep the manual available for reference.

In addition to helping you operate your CHECKMATE crane scale effectively, Allegany Technology is available to help you with all aspects of industrial weighing. We offer a broad range of other industrial weighing equipment, as well as:

- engineering services (to help you solve industrial weighing problems)
- training
- equipment repair and restoration.

## *Safety*

Remember, cranes and their associated equipment can be dangerous. As the user, you are responsible for correct and safe installation, operation, and maintenance of this equipment. Users must follow the specific instructions and safety precautions located throughout this manual. In addition they must:

- Be aware of and follow the safety standards of the Occupational Safety and Health

## 1.2 Components of the CHECKMATE Crane Scale

The major components of the CHECKMATE crane scale are shown in Figure 1-2.

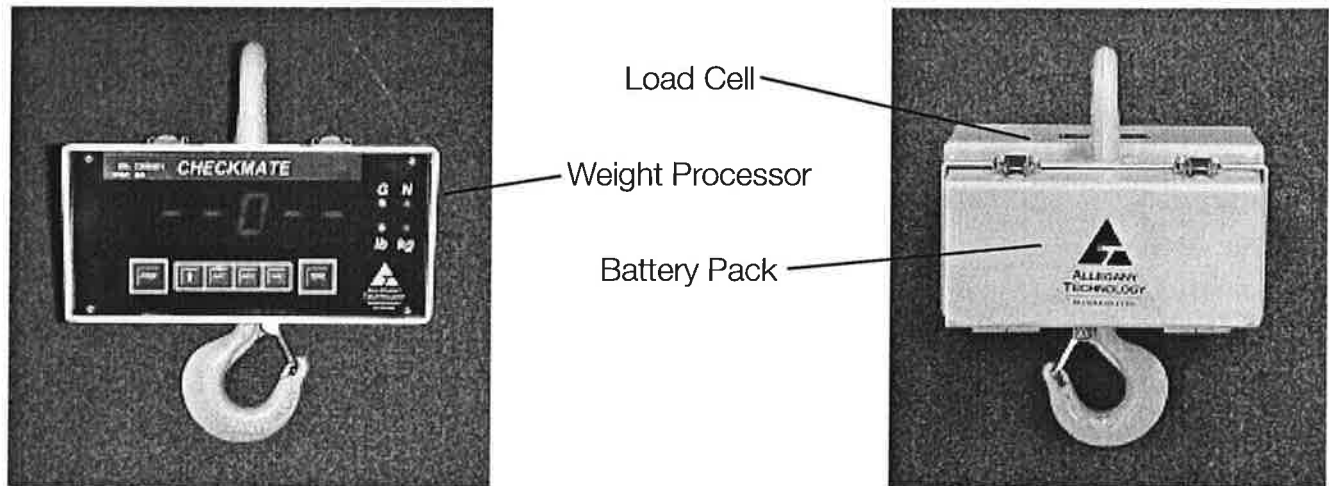


Figure 1-2. CHECKMATE Scale Components

### Load Cell

Inside the body is a load cell that produces an electrical signal proportional to the load.

### Weight Processor

The weight processor performs weight conversion and other associated functions.

### Battery Pack

The battery pack provides power for the crane scale.

## 1.3 CHECKMATE Options

CHECKMATE crane scales can be equipped with five options: a Headroom Loss Adapter, a Wireless Link, Heat Shields, a Long-Life Battery, and an AC Power Pack.

### 1.3.1 Headroom Loss Adapter

In situations with very limited overhead clearance, the headroom loss associated with the standard CHECKMATE design is sometimes unacceptable. In those instances, Allegany Technology offers the CHECKMATE with a Headroom Loss Adapter (Figure 1-3).

Cranes with this option are available in capacities ranging from 1,000 to 600,000 pounds (500 to 300,000 kg).

## 3. OPERATING THE CRANE SCALE

Before describing the operation of the CHECKMATE crane scales it is important to understand some background information, including the crane scale's controls and modes of operation, and how to enter numeric information (such as tare values) into the scale. We will begin by explaining the basic controls and display located on the crane scale's Weight Processor module, then introduce the crane scale's various operating modes, and finally describe the number entry process.

### 3.1 Background Information for Crane Operation

#### 3.1.1 Understanding the Basic Controls on the Weight Processor Module

Figure 3-1 shows the Weight Processor module's faceplate. The functions of the display, indicator lights, and keys are summarized on the next page.

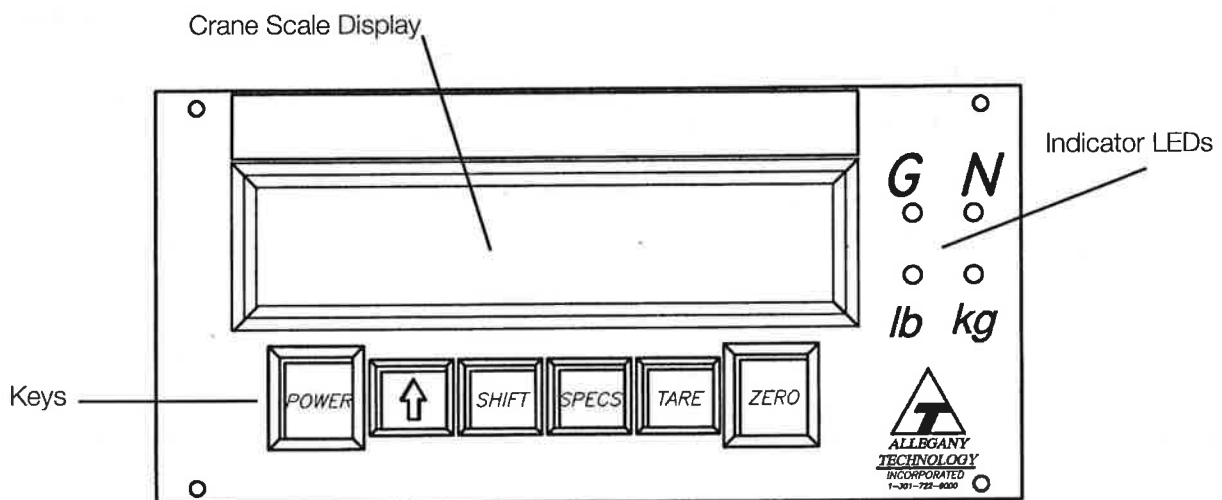
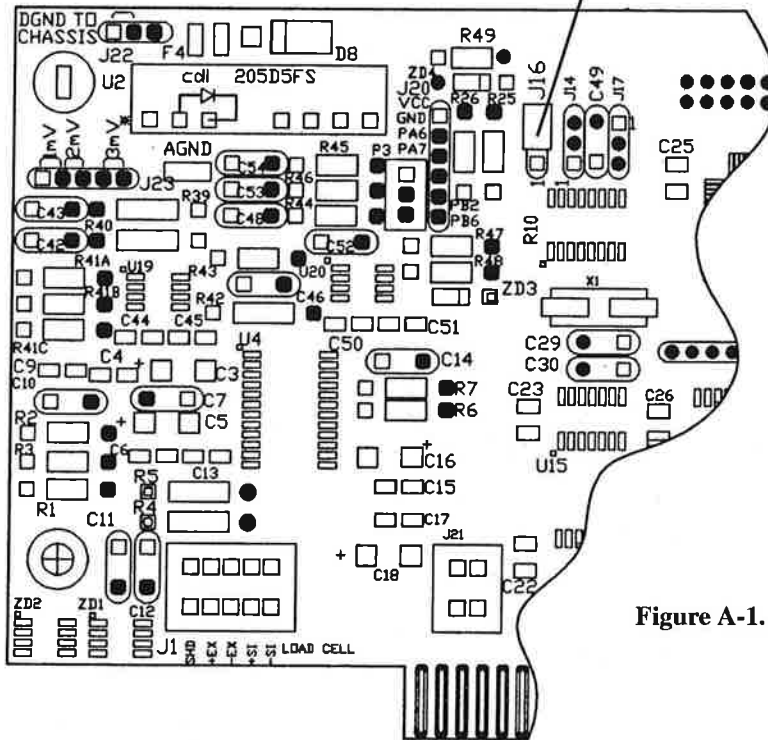


Figure 3-1. The Crane Scale's Faceplate

Jumper plug J16 in normal operation mode.



(Right side of circuit board is removed for clarity)

Figure A-1. Jumper Plug Setting for Normal Operation.

Jumper plug J16 in specifications mode.

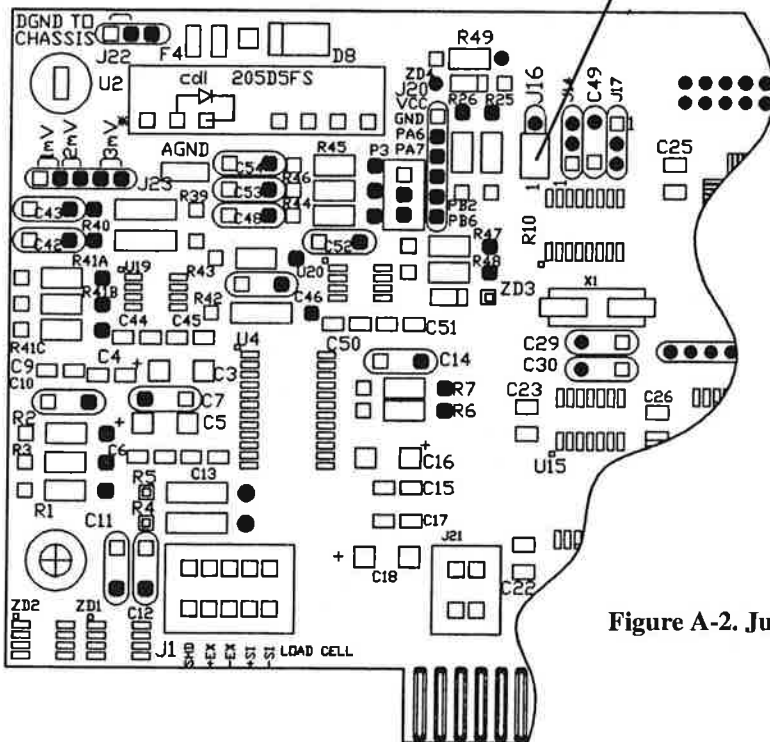


Figure A-2. Jumper Plug Setting for Calibration.

## Appendix B

# TROUBLESHOOTING

The table below provides basic troubleshooting information. Contact your dealer or Allegany Technology for additional assistance.

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Crane scale will not power on	Power switch on battery pack not ON	Turn battery pack power switch ON
	Not holding down POWER key long enough	Hold down POWER key on display until <b>On</b> displays
	Low battery	Charge or replace battery
	TAZ not functioning	Hold down POWER key on display until <b>On</b> displays
	Battery fuse blown	Replace fuse (3A fast blow)
	Battery connections not secure	Secure connections
	Incorrect polarity on battery terminals	Switch polarity. (Incorrect polarity can damage Weight Processor. If it no longer functions, contact dealer or Allegany Technology.)
Crane scale display is blank	Crane scale entered Automatic Turn-Off Mode	Power it back on. To change or disable <i>Standby Timeout</i> see Appendix D.
Crane scale does not return to zero or does not repeat	Load cell is damaged	Replace load cell; contact Allegany Technology's Technical Services Department.
	Crane scale damaged by sudden impact	Inspect crane scale for loose parts, rattling, binding, etc. If found, contact dealer or Allegany Technology.
	Crane scale not sitting balanced in saddle of crane hook	See discussion in Section 2.2
	Load cell bolts loose	Tighten bolts; contact Allegany Technology's Technical Service Department for torque specifications
Weight display drifts or is erratic	Low battery	Charge or replace battery
	External radio, electrical, or magnetic interference	Eliminate source of interference or install shielding