JagMax™

Truck Scale Controller

CAT Version

User's Guide

15572000A
(8/98)

Mettler Toledo is recognized around the world for manufacturing and marketing high quality scales and weighing systems. With roots tracing back to 1901, the company takes pride in its long established record of employing innovation, technology, and a close working relationship with its customers to meet the diverse needs of the global marketplace. Mettler Toledo's worldwide headquarters are in Greifensee, Switzerland. Corporate offices for the North American Marketing Organization are in Worthington, Ohio.

INTRODUCTION

This publication is provided solely as a guide for individuals who have received Technical Training in servicing the METTLER TOLEDO product.

Information regarding METTLER TOLEDO Technical Training may be obtained by writing to:

METTLER TOLEDO
1150 Dearborn Drive
Worthington, Ohio 43085
(614) 438-4511

FCC Notice

This device complies with Part 15 of the FCC Rules and the Radio Interference Requirements of the Canadian Department of Communications. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

SOFTWARE VERSION

This manual properly describes the operation and functionality of the METTLER TOLEDO JagMax controller. The software version and part number are displayed during the power-up sequence of the scale.

METTLER TOLEDO RESERVES THE RIGHT TO MAKE REFINEMENTS OR CHANGES WITHOUT NOTICE.

PRECAUTIONS

READ this manual BEFORE operating or servicing this equipment.

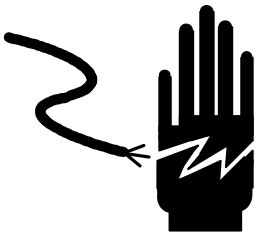
FOLLOW these instructions carefully.

SAVE this manual for future reference.

DO NOT allow untrained personnel to operate, clean, inspect, maintain, service, or tamper with this equipment.

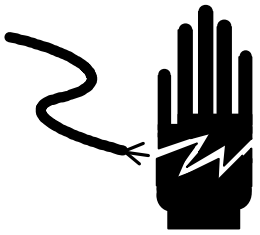
ALWAYS DISCONNECT this equipment from the power source before cleaning or performing maintenance.

CALL METTLER TOLEDO for parts, information, and service.



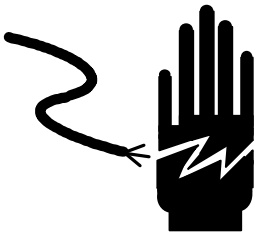
WARNING

ONLY PERMIT QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.



WARNING

FOR CONTINUED PROTECTION AGAINST SHOCK HAZARD CONNECT TO PROPERLY GROUNDED OUTLET ONLY. DO NOT REMOVE THE GROUND PRONG.



WARNING

DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

CAUTION

BEFORE CONNECTING/DISCONNECTING ANY INTERNAL ELECTRONIC COMPONENTS OR INTERCONNECTING WIRING BETWEEN ELECTRONIC EQUIPMENT ALWAYS REMOVE POWER AND WAIT AT LEAST THIRTY (30) SECONDS BEFORE ANY CONNECTIONS OR DISCONNECTIONS ARE MADE. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN DAMAGE TO OR DESTRUCTION OF THE EQUIPMENT OR BODILY HARM.

CAUTION

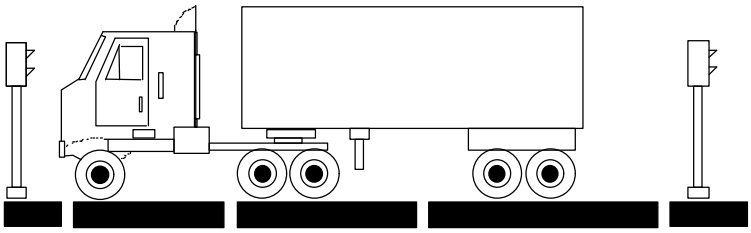
OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES.

CONTENTS

1

Introduction

This manual provides detailed information for operating the JagMax truck scale controller. Information on installing, programming, and servicing it can be found in the ***JagMax Truck Scale Controller Technical Manual***.



Review all instructions and safety precautions carefully before attempting to operate the JagMax controller! Installation and service procedures should be performed only by authorized personnel.

If you discover a problem with the information provided, please complete and return the ***Publication Evaluation Form*** found in the back of this manual. If you encounter problems not covered in this manual, please contact your authorized Mettler Toledo representative.

How to Use This Manual

Throughout this manual, the displays you will see on the JagMax controller and the commands you will be asked to make are presented in the following ways:

- Information that appears on the lower display of the JagMax controller is provided in brackets and in bold type.

  For example, **[Select Function]** means the words “Select Function” will appear on the lower display of the JagMax controller. The words may be in all caps or in lowercase and uppercase letters, depending on how they appear on the displays.

- When you are instructed to press a specific key on the keyboard attached to the JagMax terminal, that key will be in **bold**.

  For example, press **F1** means you should press **F1** on the attached keyboard. All tasks are performed using the keyboard. You will not use the keypad on the JagMax controller.

JagMax Controller Overview

Components

Before using the JagMax controller, you should first become familiar with its components and features.

Displays

The JagMax controller features an upper and lower display. The upper display shows the weight on the scale. Arrows on this display point to labels below it that indicate if the weight is in pounds or kilograms, if it is a net or gross weight, whether the scale platforms are zeroed, and whether there is movement on the platforms.

The lower display shows various prompts and other information related to the tasks you are performing.

Keypad

The JagMax controller also has a keypad. This is only used for programming the unit, not for operating it.

Keyboard

All tasks are performed using a standard “QWERTY” keyboard that is connected to the JagMax controller. This is the type of keyboard generally used with personal computers. The letters Q-W-E-R-T-Y appear on the left in the third row from the top.

Template

A template is included with the JagMax controller to place above the function (F) keys on the keyboard so you know how to use these keys for various operations.

Traffic Lights

If traffic lights are used in your facility, they will work automatically for most tasks. However, when you are weighing trucks that have more than one trailer, you will need to operate the traffic lights manually so you can indicate to the driver to move the truck forward on the scales to weigh the additional axles.

Enclosure Type

The JagMax controller is available in a general purpose enclosure (which can sit on a flat surface or be wall- or column-mounted) or in a harsh environment enclosure (for use in applications where it is exposed to high humidity, direct washdown, or corrosive environments.) Regardless of the model with which you are working, the operating procedures are the same.

However, the functions you can perform with the JagMax controller will depend on how it is programmed. Check with your supervisor or authorized Mettler Toledo representative to determine which functions you can use.

Operating Modes

The JagMax controller's functions are grouped together by category or "mode." To perform these functions, you access the particular mode by pressing the appropriate function key (the F keys at the top of the keyboard). The template included with the JagMax controller should be positioned above these keys on your keyboard. The green section on the template is labeled to help you use the appropriate function keys. The orange portion of the template refers to steps that are done during the setup of the JagMax controller and should not be used when operating the equipment.

The various modes and their associated function keys are described here. Refer to Chapter 3 for directions on weighing trucks in these modes.

Weigh Mode -- For quick processing of standard semi trucks, printing axle and gross weights, and charging the Weigh Mode fee.

F2 **Re-Weigh Mode** -- For quick re-processing of standard and non-standard trucks (a truck returns to the scale within a specified amount of time), printing axle and gross weights, and charging the reduced Re-Weigh Mode fee.

F3 **Double Mode** -- For processing or re-processing trucks with two trailers (maximum of 9 axles), printing axle and gross weights, and charging either the Double Mode or Re-Weigh Mode fee.

F4 **Triple Mode** -- For processing or re-processing trucks with three trailers (maximum of 9 axles), printing axle and gross weights, and charging either the Triple Mode or Re-Weigh Mode fee.

F5 **Moving Van Mode** -- For quick processing of moving-type trucks, printing the axle and gross weights, and charging the Moving Van mode fee.

F6 **ID Mode** -- For processing a truck, storing a weighment (printout may not be required for inbound or first weighment) and recalling that stored weight for a later, second weighment. A Gross, Tare, and Net weight ticket will then be printed, and ID Mode fee will be charged.

F7 **Certified Gross Mode** -- For processing a truck, printing Certified Gross weight ticket, and charging the Certified Gross Mode fee.

F8 **Certified Tare Mode** -- For processing a truck, printing a Certified Tare weight ticket, and charging Certified Tare Mode fee.

You cannot use any other keys to access these modes. Also, during the setup of the JagMax controller, some of these modes may have been set so that you do not have access to them. In these cases, pressing the function keys for those modes will result in the mode name being displayed, followed by **[Invalid Function]**.

Within each of these modes, you will be prompted to make various selections. You can scroll through the selections by pressing **F9** or the space bar. Note: Only the scales that are configured will be shown. For example, if three scales have been configured, the prompt selections will be for **[Scale A]**, **[Scale B]**, and **[Scale C]**.

For information on using the remaining function keys (**F10 - F12**), see *Chapter 3, Advanced Functions*.

Weighing Terminology

Understanding the following terminology specifically related to the use of the JagMax controller will help you operate it. Please familiarize yourself with the following terms.

Gross Weight – The entire weight of a truck and its contents.

Certified Gross Weight – A printout which provides the gross weight of a truck.

Tare Weight – The weight of an empty truck.

Certified Tare Weight – A printout which provides the tare weight of a truck.

Net Weight – The weight of a sample, product or load. This is determined by deducting the weight of the empty truck from the weight of the loaded truck.

G-T-N – A printout that shows the gross, tare, and net weights of a truck.

Threshold -- A value that the JagMax controller uses to determine whether or not there is a truck on the scale. When the steering axle scale (Scale A) is above the threshold value, the system thinks there is a truck on the scale. This threshold value is also used to activate the traffic lights and the prompts on the lower display of the JagMax controller.

In-Process File – A file within the JagMax controller system that stores information from the first half of a two-part weighing transaction. An **In-Process Truck** is a truck that has completed one part of a two-part weighing transaction (which means it is an outbound truck.)

Audit Trail Printing – A log of all transactions that features a brief description of each transaction. Audit trail printing is usually done on a second printer attached to the JagMax controller.

Zero Range – A range within which it is possible to set an indicator (controller) to a balance of zero.

2 Basic Operations

Basic Weighing Instructions

Idle Mode

When you first use the JagMax controller, as well as after you have completed weighing a truck, the controller will be in idle mode. This means there is no weight (no truck) on the scale.

The traffic light(s) will be green, indicating that the weighing system is ready to process a truck (or the next truck). If a scoreboard is used with the JagMax controller to display the ticket number, its display will be blanked.

The lower display on the JagMax controller will show the current time using this format (for hours, minutes, seconds):

HH:MM:SS

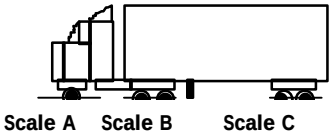
Once a truck pulls on to the scale, its weight will appear on the upper display. An arrow will point to one of the labels below this display to indicate the weighing unit (lb or kg). If an optional scoreboard is used with the JagMax controller to display the ticket number, it will display the ticket number for this truck.

The JagMax controller will be set to operate in either automatic or semi-automatic mode, which determines what actions you need to take.

Semi-Automatic Mode

Most truck stop operations require the flexibility to weigh (and charge) for a variety of trailer combinations. The JagMax controller allows you to select the appropriate weighing mode when it is programmed to operate in a semi-automatic mode. The following are general instructions for weighing a truck in semi-automatic mode.

1. Instruct the truck driver to drive the truck onto the scale and position the front axle on scale A. (The example shown here depicts a three-scale system.)



   The JagMax controller will already have been set with a threshold value. Once the weight on the first scale (scale A) goes over this threshold value, the controller recognizes that a truck is on the scale. The traffic light(s) will turn red, and the JagMax controller will be ready to perform various weighing operations.

2. The display will read [Select Function]. Press the function (F) key corresponding to the weighing mode you wish to use:

   F1 – Weigh Mode F5 – Moving Van Mode

   F2 – Re-Weigh Mode F6 – ID Mode

F3 – Double Mode F7 – Certified Gross Mode

F4 – Triple Mode F8 Certified Tare Mode

Note: If both Truck ID and Comment were disabled in setup, the JagMax controller immediately saves the weight and prints a ticket as long as the weight on all scales are valid and there is no motion on any of the scales.

3. If the mode you choose was disabled when the JagMax controller was setup, the display will read [INVALID FUNCTION] then return to [Select Function], allowing you to select another weighing mode.
4. At the **[Truck ID:]** prompt, enter a truck ID with up to 16 characters, then press Enter.
   - If you do not want to enter a truck ID, simply press Enter.
   - If the Truck ID field was disabled in setup, the [Truck ID:] prompt is skipped and the program automatically moves on to the next display.
5. At the [Comment:] prompt, enter a comment up to 45 characters, then press Enter. The comment will print on the ticket (if this option was selected for the ticket format during the setup of the JagMax controller) and on the audit trail printer (if this was enabled in setup). However, the comment will not be stored in the transaction file.
   - If you do not want to enter a comment, simply press Enter.
   - If the comment field was disabled in setup, the **[Comment:]** prompt is skipped and the program automatically moves on to the next display.
6. The weight will be taken, and a ticket will be printed. (The format of the ticket and the information on it will depend on the print format selections made during the setup of the JagMax controller.)

Note: If **[Load Paper+Enter]** is displayed, the printer is out of paper and unable to receive data from the JagMax controller. Load paper into the printer, and press **ENTER**.

7. The exit light will then turn green, indicating that the truck driver can move the truck off the scale. When the summed weight drops below the pre-set threshold value, the controller will return to the idle mode. The system is now ready to process the next truck.

Automatic Mode

Automatic mode is used for simple weighing and automatically selects Weigh Mode.

When a truck pulls on to the scale and the weight on the steering axle scale (scale A) goes over the pre-set threshold value, the traffic light(s) turns red.

Note: If both Truck ID and Comment were disabled in setup, the JagMax controller immediately saves the weight and prints a ticket as long as the weight on all scales are valid and there is no motion on any of the scales.

1. At the **[Truck ID:]** prompt, enter a truck ID with up to 16 characters, then press **Enter**.
   - If you do not want to enter a truck ID, simply press **Enter**.
   - If the Truck ID field was disabled in setup, the **[Truck ID:]** prompt is skipped and the program automatically moves on to the next display.
2. At the **[Comment:]** prompt, enter a comment up to 45 characters, then press **Enter**. The comment will print on the ticket (if this option was selected for the ticket format during the setup of the JagMax controller) and on the audit trail printer (if this was enabled in setup). However, the comment will not be stored in the transaction file.
   - If you do not want to enter a comment, simply press **Enter**.
   - If the comment field was disabled in setup, the **[Comment:]** prompt is skipped and the program automatically moves on to the next display.

As soon as there is no motion on any of the scales, a ticket is printed, and the exit light turns green while the entrance light remains red.

When the summed weight drops below the threshold value, the entrance light turns green and the cycle can start again.

Zeroing the Scale

In some cases, the truck scales connected to the JagMax controller may not be at zero (for example, if there is snow on the scales). You can zero the scale before weighing a truck to compensate for this weight.

1. Press the **0** key on the keyboard while there is no truck on the scale.

   - If all scales are within the zero range, the display will read **[Zeroing Scales]** and the JagMax controller will zero the scales.
   - If any scale is out of zero range, the display will read **[Out of ZeroRange].** The controller will then return to Idle Mode.

Switching Units

There may be instances when you need to switch the weighing units used on the JagMax controller.

1. Press the **U** key on the keyboard. The traffic light will turn red and the display will read **[Switching Units].** This toggles all scales between the primary and secondary weighing units that were selected when the JagMax controller was programmed.

   - If you are not allowed to change the weighing units, the display will read **[Switch. Disabled]** for two seconds.
   - If changing the weighing units will result in mismatched units on the scales, the display will read **[INVLD OTHR UNITS]** for two seconds.
   - If neither of these error messages appear, the weighing units will be switched on each scale. The controller will return to Idle Mode.

Note: Whatever threshold value was entered when the JagMax controller was programmed will still be used when you change the weighing units. For example, if the threshold value was set at 10,000 and the scales are using pounds as the weighing unit, the JagMax controller will interpret the threshold to be 10,000 pounds. If you change the weighing unit to kilograms, the JagMax controller will interpret the threshold to be 10,000 kilograms.

3 Weighing Modes

Weigh Mode

F1

To weigh a standard semi-truck and print the axle and gross weights, press **F1** to enter Weigh Mode. **[Weigh Mode]** is displayed for two seconds. If Weigh Mode was disabled in setup, **[Invalid Function]** will be displayed for two seconds, then the display will return to **[Select Function].**

Note: If both Truck ID and Comment were disabled in setup, the JagMax controller immediately saves the weight and prints a ticket as long as the weight on all scales are valid and there is no motion on any of the scales.

1. At the **[Truck ID:]** prompt, enter a truck ID with up to 16 characters, then press Enter.
   - If you do not want to enter a truck ID, simply press **Enter**.
   - If the Truck ID field was disabled in setup, the **[Truck ID:]** prompt is skipped and the program automatically moves on to the next display.

2. At the **[Comment:]** prompt, enter a comment up to 45 characters, then press **Enter**. The comment will print on the ticket (if this option was selected for the ticket format during the setup of the JagMax controller) and on the audit trail printer (if this was enabled in setup). However, the comment will not be stored in the transaction file.
   - If you do not want to enter a comment, simply press **Enter**.
   - If the comment field was disabled in setup, the **[Comment:]** prompt is skipped and the program automatically moves on to the next display.

   At this point, if one of the scales is over capacity, under capacity, or has bad weight data, you will see one of the following displays:

   [Scale X:OVERCAP]

   [Scale X:UNDERCAP]

   [Scale ERROR]

   The display will remain until all of the weights on the scales are valid.

   In addition, if there is any motion on the scale, **[. . . Motion . . .]** will be displayed. The JagMax controller will not continue the weighing process until there is no motion on the scales.

Note: If **[Load Paper+Enter]** is displayed, the printer is out of paper, and is unable to receive data from the JagMax controller. Load paper into the printer, and press **ENTER**.

   Once there is no motion on the scales, the weights are stored. **[Printing . . . .]** is displayed while the Weigh Mode ticket will be printed.

   Audit trail printing automatically takes place if that option was selected in setup.

3. If semi-automatic audit trail printing was selected in setup, **[Audit Trail: Y]** will be displayed. Press **F9** or the space bar to toggle between **[Y]** or **[N]** and press **Enter** to make a selection.
   - If you selected **[Y],** the transaction will be printed on the audit trail printer.

   [Exit Scale Now] will be displayed, and the scale exit traffic light will turn green, signaling the truck driver to drive the truck off the scale. The scale

entrance light remains red. This display remains until the summed weight on all the scales drops below the threshold weight, indicating that there is no longer a truck on the scale.

The controller will return to Idle Mode.

Re-Weigh Mode

If a single trailer semi-truck is being weighed for a second time, and should be charged the lower re-weigh fee, weigh it in Re-Weigh Mode. Press **F2**. **[Re-Weigh Mode]** is displayed for two seconds. If this mode was disabled in setup, **[Invalid Function]** will be displayed for two seconds, then the display will return to **[Select Function].**

Refer to the steps outlined in Weigh Mode for weighing the truck after the **[Re-Weigh Mode]** display appears. Re-Weigh Mode works the same way. The only difference is that the re-weigh fee will be charged.

Double Mode

This mode is used to weigh trucks with two trailers. This will require you to weigh the truck axles that fit on the scales, and then have the driver move the truck forward on the scales so that you can weigh the remaining axles.

Press **F3** to enter Double Mode. **[Double Mode]** will be displayed for two seconds. If Double Mode was disabled in setup, **[Invalid Function]** will be displayed for two seconds, then the display will return to **[Select Function].**

Note: In both Double and Triple Mode (see the next section), if you chose the wrong mode, you can press **Esc**. The display will read **[Abort Transaction? Y]**. Choose **[Y]** to exit and go back to the **[Select Function]** display. You can also press **Esc** to start over after you have added some weight to the scale.

1. Instruct the driver to position the truck on scale platform 1 and 2.
2. At the **[Truck ID:]** prompt, enter a truck ID with up to 16 characters, then press **Enter**.
   - If you do not want to enter a truck ID, simply press **Enter**.
   - If the Truck ID field was disabled in setup, the **[Truck ID:]** prompt is skipped and the program automatically moves on to the next display.
3. At the **[Comment:]** prompt, enter a comment up to 45 characters, then press **Enter**. The comment will print on the ticket (if this option was selected for the ticket format during the setup of the JagMax controller) and on the audit trail printer (if this was enabled in setup). However, the comment will not be stored in the transaction file.
   - If you do not want to enter a comment, simply press **Enter**.
   - If the comment field was disabled in setup, the **[Comment:]** prompt is skipped and the program automatically moves on to the next display.

The next display reads **[N:TTTTTT].** N is the number of weights recorded so far and TTTTTT is the total weight recorded.

To Add Weight

1. Press **F9** or the space bar to scroll through the gross scale weights. This changes the display to read **[Scale X: WWWWWW]** where X is the scale identifier (A, B, C, D) and WWWWWW is the scale's gross weight, if valid, or **[OVERCAP]**, **[UNDERCAP]** or **[ERROR].**

Note: Only scales that were configured during the setup of the JagMax controller will be displayed.

2. Press **Enter** to add the weight of the displayed scale. When the weight on the selected scale is valid (not **[OVERCAP]**, **[UNDERCAP]** or **[ERROR]**), the display will read **[Add Scale X=WWWWWW? Y]** (where X s the scale identifier and WWWWWW is the scale weight.
3. Press **F9** or the space bar to toggle between **[Y]** or **[N]** and press **Enter** to make a selection.
   - If **[N]** is selected, the weight will not be added and the display will return to **[X: YYYYYY]**.
   - If **[Y]** is selected, the weight will be added and the display will return to **[X: YYYYYY]**.
4. Scroll to the next scale you wish to add. Repeat the process above, re-positioning the truck as needed. Remember, you will need to operate the traffic lights manually to indicate to the driver when to move the truck.

To Delete Weight

1. To delete the last recorded weight, press **Delete** on the keyboard. The display then reads **[Delete Last Wt?Y].**
2. Press **F9** or the space bar to toggle between [**Y**] and [**N**]. Press Enter to accept the current selection.
   - Select [**Y**] if you want to delete the last recorded weight.
   - Select [**N**] to keep the last recorded weight.

To Abort Transaction

1. To escape out of this mode without completing it, press **Esc** while **[X: YYYYYY]** is displayed. **[Abort Trans? N]** will be displayed.
2. Press **F9** or the space bar to toggle between **[Y]** and **[N].** Press **Enter** to accept the current selection.
   - If **[Y]** is selected, the display will return to **[Select Function]**.
   - If **[N]** is selected, the display will return to **[X: YYYYYY]**.

To Complete the Transaction

1. When you have finished weighing the truck, press **F1** to select the double mode fee or **F2** to select the re-weigh mode fee. The display then reads **[Printing…]**, and the double mode ticket is printed.

   Audit trail printing automatically takes place if that option was selected in setup. If semi-automatic audit trail printing was selected in setup, **[Audit Trail: Y]** will be displayed.

Note: If **[Load Paper+Enter]** is displayed, the printer is out of paper, and is unable to receive data from the JagMax controller. Load paper into the printer, and press **ENTER**.

2. Press **F9** or the space bar to toggle between **[Y]** or **[N]** and press **Enter** to make a selection.

   If you selected **[Y],** the transaction will be printed on the audit trail printer.
3. **[Exit Scale Now]** will be displayed, and the scale exit traffic light will turn green, signaling the truck driver to drive the truck off the scale. The scale entrance traffic light remains red. This display remains until the summed weight on all the scales drops below the threshold weight, indicating that there is no longer a truck on the scale.

   The controller will return to Idle Mode.

Triple Mode

F4

Triple Mode is used for weighing trucks with three trailers. Press **F4** to enter Triple Mode. The **[Triple Mode]** prompt will be displayed for two seconds. If Triple Mode was disabled in setup, **[Invalid Function]** will be displayed for two seconds, then the display will return to **[Select Function].**

Refer to the directions for weighing in Double Mode. Triple Mode works the same way as the Double Mode, except that a Triple Mode ticket will be printed and the triple mode or re-weigh mode fee will be charged

Moving Van Mode

F5

Press **F5** to enter Moving Van Mode. **[Moving Van Mode]** will be displayed for two seconds. If Moving Van Mode was disabled in setup, **[Invalid Function]** will be displayed for two seconds, then the display will return to **[Select Function].**

1. At the **[Truck ID:]** prompt, enter a truck ID with up to 16 characters, then press **Enter**.
   - If you do not want to enter a truck ID, simply press **Enter**.
2. If the Truck ID field was disabled in setup, the **[Truck ID:]** prompt is skipped and the program automatically moves on to the next
   - If you do not want to enter a comment, simply press **Enter**.
   - If the comment field was disabled in setup, the **[Comment:]** prompt is skipped and the program automatically moves on to the next display.

     At this point, if one of the scales is over capacity, under capacity, or has bad weight data, you will see one of the following displays:

     [Scale X:OVERCAP]

     [Scale X:UNDERCAP]

     [Scale ERROR]

     The display will remain until all of the weights on the scales are valid.

     In addition, if there is any motion on the scale, **[. . . Motion . . .]** will be displayed. The JagMax controller will not continue the weighing process until there is no motion on the scales.

     Once there is no motion on the scales, the weights are stored. **[Printing . . . .]** is displayed while the Moving Van Mode ticket is printed.

3. Audit trail printing automatically takes place if that option was selected in setup. If semi-automatic audit trail printing was selected in setup, **[Audit Trail: Y]** will be displayed. Press **F9** or the space bar to toggle between **[Y]** or **[N]** and press **Enter** to make a selection.
   - If you selected **[Y],** the transaction will be printed on the audit trail printer.

   [Exit Scale Now] will be displayed, and the scale exit traffic light will turn green, signaling the truck driver to drive the truck off the scale. The scale entrance light remains red. This display remains until the summed weight on all the scales drops below the threshold weight, indicating that there is no longer a truck on the scale.

   The controller will return to the Idle Mode.

Note: If both Truck ID and Comment were disabled in setup, the JagMax controller immediately saves the weight and prints a ticket as long as the weight on all scales are valid and there is no motion on any of the scales.

Note: If **[Load Paper+Enter]** is displayed, the printer is out of paper, and is unable to receive data from the JagMax controller. Load paper into the printer, and press **ENTER**.

ID Mode

Press **F6** to enter ID Mode.

F6

The **[ID Mode]** prompt will be displayed for two seconds. If ID Mode is disabled in setup, the display will read **[INVALID FUNCTION]** for two seconds then return to the **[Select Function]** display.

1. At the **[Truck ID:]** prompt, enter a truck ID of up to 16 characters then press **Enter**. (If Auto Assign ID was enabled during setup, you can simply press **Enter** to have an ID automatically assigned.)
2. If the ID is found in the in-process trucks file within the JagMax controller, the display will read **[InProcess Trk? Y]**. This lets you know that the first weight for this truck has already been recorded, making it an outbound truck.
   - Press **Enter** to select **[Y]** if this is the second time the truck is being weighed (also referred to as second or outbound weighment).
   - If this is not the second time it is being weighed, you can press the **F9** key or space bar to toggle to **[N]**, followed by the **Enter** key. This returns you to the **[Truck ID:]** prompt.
3. If the ID was not found in the in-process trucks file, the display will read **[New Truck? Y]**. It is considered an inbound truck.
   - Press **Enter** to select **[Y]**.
   - If this is not the first time the truck is being weighed (i.e. it is a second or outbound weight), use the **F9** key or space bar to toggle to **[N]** and press **Enter**. This returns you to the **[Truck ID:]** prompt.
4. After determining if the truck being weighed is inbound or outbound, the display will read **[Comment:]** if this was enabled in setup. Enter a comment of up to 45 characters followed by **Enter**. Or, simply press **Enter** to leave the comment blank.

   At this point, if one of the scales is over capacity, under capacity, or has bad weight data, you will see one of the following displays:

   [Scale X:OVERCAP]

   [Scale X:UNDERCAP]

   [Scale ERROR]

   The display will remain until all of the weights on the scales are valid.

   If there is motion on any of the scales, **[. . Motion . .]** will be displayed until there is no motion on all scales simultaneously.

   For an inbound truck with inbound ticket printing enabled in setup, **[Printing…]** will be displayed, and the ID Mode inbound ticket will be printed. The data will be stored in the In-Process file. ID Mode inbound information is NOT printed to the audit trail port, regardless of the audit trail mode selected in setup.

   For an outbound truck (second weight), **[Printing…]** will be displayed and the ID Mode outbound ticket (G-T-N) will be printed. The inbound record will be deleted from the in-process file.

5. Audit trail printing automatically takes place if that option was selected in setup. If semi-automatic audit trail printing was selected in setup, **[Audit Trail: Y]** will be displayed. Press **F9** or the space bar to toggle between **[Y]** or **[N]** and press **Enter** to make a selection.

Note: If **[Load Paper+Enter]** is displayed, the printer is out of paper, and is unable to receive data from the JagMax controller. Load paper into the printer, and press **ENTER**.

- If you selected **[Y],** the transaction will be printed on the audit trail printer.

[Exit Scale Now] will be displayed, and the scale exit traffic light will turn green, signaling the truck driver to drive the truck off the scale. The scale entrance light remains red. This display remains until the summed weight on all the scales drops below the threshold weight, indicating that there is no longer a truck on the scale.

The controller will return to the Idle Mode.

Certified Gross Mode

F7

Press **F7** to enter Certified Gross Mode.

The **[Cert. Gross Mode]** prompt will be displayed for two seconds.

If the Certified Gross Mode was disabled in setup, the display will read **[INVALID FUNCTION]** for two seconds, then return to the **[Select Function]** display.

Refer to the instructions for Weigh Mode. The only differences will be that a Certified Gross Mode ticket is printed and a Certified Gross mode fee is charged.

Certified Tare Mode

F8

Press **F8** to enter Certified Tare Mode.

The **[Cert. Tare Mode]** prompt will be displayed for two seconds.

If the Certified Tare Mode was disabled in setup, the display will read **[INVALID FUNCTION]** for two seconds, then return to the **[Select Function]** display.

Refer to the instructions for Weigh Mode. The only differences will be that a Certified Tare Mode ticket is printed and the Certified Tare mode fee is charged.

NOTES

4 Advanced Functions

Overview

In addition to the functions described in Chapter 2, the JagMax controller may have been set up to allow you to perform other tasks such as voiding a transaction or printing a specific report. Some of these functions may be restricted to use by supervisors or other authorized personnel only.

Re-Printing a Ticket

1. To reprint a ticket, press **F10** when there is not a truck on the scale. The traffic light will turn red, and **[Re-Print Ticket]** will be displayed for two seconds, followed by the **[In-Process: N]** prompt.
2. Press **Enter** to accept the current selection **[N]** if the ticket to be reprinted is not for an in-process truck. If there are no records in the transaction file, the display will read **[NO TRANSACTIONS]** for two seconds then the controller will return to the Idle Mode.
3. Press **F9** or the space bar to toggle to **[Y]** then press **Enter** if the ticket to be reprinted is for an in-process truck (ID mode truck which has only been weighed once). If there are no records in the in-process file, the display will read **[NONE IN-PROCESS]** for two seconds then the controller will return to the Idle Mode.
4. **[ID/Ticket: Tkt]** will be displayed. At this prompt, you select whether to search for the ticket by its ID or its ticket number. Press **F9** or the spacebar to toggle between **[Tkt]** and **[ID]**. Press **Enter** when your selection is displayed.

Note: If **[Load Paper+Enter]** is displayed, the printer is out of paper, and is unable to receive data from the JagMax controller. Load paper into the printer, and press **ENTER**.

Search by Ticket Number

1. At the **[Ticket:]** prompt, type the number of the ticket to re-print and press **Enter**.
2. If only one record with this ticket number is found in the selected file (in-process or transaction), the display reads **[Printing…]**.
3. If more than one record with this ticket number is found in the selected file (in-process or transaction), the display will read **[MM/DD/YY HH:MM]**, indicating the date and time of the first matching ticket. Press **F9** or the space bar to view the date and time of the next record with a matching ID or ticket number. If another record is found, its date and time are displayed. If you have scrolled through all of the matching records, the display reads **[REPEATING]** for two seconds. The program will find the first matching record in the selected file then return to the **[MM/DD/YY HH:MM]** display. When the date and time of the ticket you want to reprint is displayed, press **Enter**. **[Printing…]** will be displayed and the ticket will be printed.
4. If a record with this ID is not found in the selected file (in-process or transaction), the display reads **[NO MATCHES]** for two seconds.
5. The controller will return to the Idle Mode.

Search by ID

1. If you are searching by ID, at the **[ID:]** prompt, type the ID of the ticket to re-print and press **Enter**.
2. If only one record with this ID number is found in the selected file (in-process or transaction), the display reads **[Printing…]**.
3. If more than one record with this ID number is found in the selected file (in-process or transaction), the display will read **[MM/DD/YY HH:MM]**, indicating the date and time of the first matching ticket. Press **F9** or the space bar to view the date and time of the next record with a matching ID or ticket number. If another record is found, its date and time are displayed. If you have scrolled through all of the matching records, the display reads **[REPEATING]** for two seconds. The program will find the first matching record in the selected file then return to the **[MM/DD/YY HH:MM]** display. When the date and time of the ticket you want to reprint is displayed, press **Enter**. **[Printing…]** will be displayed and the ticket will be printed.
4. If a record with this ID is not found in the selected file (in-process or transaction), the display reads **[NO MATCHES]** for two seconds.
5. The controller will return to Idle Mode.

Note: If **[Load Paper+Enter]** is displayed, the printer is out of paper, and is unable to receive data from the JagMax controller. Load paper into the printer, and press **ENTER**.

Setup and Reports Menu

For information on setting up the JagMax and printing specific reports, refer to the **JagMax Truck Scale Controller Technical Manual**, *Chapter 3, Application Set-up.*

Voiding a Transaction

1. To void a transaction, press **F12** when there is not a truck on the scale. The traffic light will turn red and **[Void Transaction]** will be displayed for two seconds. If there are no records in the transaction file, the program will display **[NO TRANSACTIONS]** for two seconds before returning to the Idle Mode.
2. **[ID/Ticket: Tkt]** will be displayed. At this prompt, select whether to search for the transaction by its ID or its ticket number. Press **F9** or the spacebar to toggle between **[Tkt]** and **[ID]**. Press **Enter** to make your selection.

Voiding a Transaction by Ticket Number

1. At the **[Ticket:]** prompt, type in the ticket number of transaction you want to void and press **Enter**.
2. If only one record with this ticket number if found, the display reads **[Are You Sure? N]** which gives you the chance to make sure this is what you want to do. Press **F9** or the spacebar to toggle between **[Y]** and **[N]**, and press **Enter** when your selection is displayed.
   - Select **[Y]** to void the transaction. The display will read **[TRANS. VOIDED]**, then return to the Idle Mode.
   - Select **[N]** to return to the time display without voiding the transaction.

3. If more than one record with this ticket number is found in the selected file (in-process or transaction), the display will read **[MM/DD/YY HH:MM]**, indicating the date and time of the first matching ticket. Press **F9** or the space bar to view the date and time of the next record with a matching ID or ticket number. If another record is found, its date and time are displayed. If you have scrolled through all of the matching records, the display reads **[REPEATING]** for two seconds. The program will find the first matching record in the selected file then return to the **[MM/DD/YY HH:MM]** display. When the date and time of the ticket you want to reprint is displayed, press **Enter**. **[Printing…]** will be displayed and the ticket will be printed. The controller will return to the Idle Mode.
4. If a record with this ID is not found in the selected file (in-process or transaction), the display reads **[NO MATCHES]** for two seconds, then returns to the Idle Mode.

Voiding a Transaction by ID

1. At the **[ID]** prompt, type in the ID of the transaction you wish to void. Press **Enter**.
2. If only one record with this ID number if found, the display reads **[Are You Sure? N]** which gives you the chance to make sure this is what you want to do. Press **F9** or the spacebar to toggle between **[Y]** and **[N]**, and press **Enter** when your selection is displayed.
   - Select **[Y]** to void the transaction. The display will read **[TRANS. VOIDED],** then return to the Idle Mode.
   - Select **[N]** to return to the time display without voiding the transaction.
3. If more than one record with this ID number is found in the selected file (in-process or transaction), the display will read **[MM/DD/YY HH:MM]**, indicating the date and time of the first matching ticket. Press **F9** or the space bar to view the date and time of the next record with a matching ID or ticket number. If another record is found, its date and time are displayed. If you have scrolled through all of the matching records, the display reads **[REPEATING]** for two seconds. The program will find the first matching record in the selected file then return to the **[MM/DD/YY HH:MM]** display. When the date and time of the ticket you want to reprint is displayed, press **Enter**. **[Printing…]** will be displayed and the ticket will be printed. The controller will return to the Idle Mode.
4. If a record with this ID is not found in the selected file (in-process or transaction), the display reads **[NO MATCHES]** for two seconds, then returns to the Idle Mode.

NOTES

5 Additional Information

Cleaning and Maintenance

You may wipe the JagMax controller's enclosure and keypad and the attached QWERTY keyboard with a clean, soft cloth that has been dampened with a mild glass cleaner. Do not use any type of industrial solvent such as toluene or isopropanol (IPA) as it could damage the controller's finish. Do not spray cleaner directly on the controller.

Regular maintenance inspections and calibration by a qualified service technician are recommended.

Installation, Programming and Service

Information on installing, configuring, and servicing the JagMax controller is found in the **JagMax Terminal Technical Manual**. Installation, configuration, and service should be performed only by qualified personnel. Please contact your local Mettler Toledo representative for assistance.

Error Codes

The following table lists the JagMax controller's error messages, probable causes, and remedies. For additional assistance, contact your authorized Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
ALC_EE_CHKSM_ER	A Checksum Error was detected in accessing the Scale Calibration parameters on the Analog Load Cell Card	Static, power problems, inductive noise. Bad EEPROM.	Contact your authorized Mettler Toledo representative.
ALC_EE_NO_ACCESS	JagMax controller cannot access Scale Calibration parameters on the Analog Load Cell card.	JagMax controller configured for a nonexistent Analog L/C card. Analog L/C card jumpered or seated improperly or not working.	Contact your authorized Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
ALC_EEPROM_ERROR	Analog L/C EEPROM memory error	Static, power problems, inductive noise. Bad EEPROM.	Re-power and recalibrate. Check for good power, suppress noise; take static precautions. Contact your authorized Mettler Toledo representative.
ALC_EPROM_ERROR	Analog L/C EEPROM memory error	Defective Analog PCB.	Contact your authorized Mettler Toledo representative.
ALC_MELSI_ERROR	Analog load cell A/D error	A/D error has occurred	Re-power the unit. Check with weight simulator. Contact your authorized Mettler Toledo representative.
ALC_NO_RESPONSE	Analog load cell A/D communications error.	A/D error has occurred	Re-power the unit. Check all ALC jumpers. Check with weight simulator. Contact your authorized Mettler Toledo representative.
ALC_RAM_ERROR	Analog load cell A/D RAM error.	Static, power problems, inductive noise. Bad Analog PCB.	Re-power and recalibrate. Check for good power, suppress noise; take static precautions. Contact your authorized Mettler Toledo representative.
ALC_RESPONSE_ERR	Analog Load Cell A/D communications response error.	Internal error.	Re-power the unit. Check with weight simulator. Contact your authorized Mettler Toledo representative.
ALC_UNDEFINED_ERR	Analog Load Cell A/D undefined error.	Analog load cell A/D memory error has occurred.	
ARCNET_BAD_ADDRS ARCNET_DUP_ADDRS	ARCnet address jumpers configured with either a duplicate address with another node on the network or an illegal ARCnet address.	The ARCnet address jumpers are not set up properly	Contact your authorized Mettler Toledo representative.
ARCNET_TEST_ERR	Standard power up testing of the ARCnet adapter failed.	ARCnet adapter failure.	Re-power. Contact your authorized Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
BAD_NUMBER_CELLS	JagMax controller configured with an illegal number of load cells in a Power Cell scale or DJ-Box scale.	Improper setup.	Contact your authorized Mettler Toledo representative.
BRAM Bad - Rst?	Battery backed RAM error.	Setup parameters in Battery Back RAM corrupted. Likely causes are too long of storage for JagMax controller; power has been removed from JagMax controller memory too long; battery failure; or hardware failure.	Contact your authorized Mettler Toledo representative.
BRAM CKSUM ERROR	Setup variables corrupt	Electrical malfunction. Power has been removed from the JagMax controller memory too long. The battery and super-cap on the controller card has been drained.	Press **ENTER** to continue. Contact your authorized Mettler Toledo representative.
BRAM Err - Rst? Y (Will appear during power-up sequence only after loading new software.) BRAM VERSION ERR	Different program version detected. Storage locations for setup parameters and memory locations have been moved in a new software update.	New software version has been downloaded to JagMax controller.	Contact your authorized Mettler Toledo representative.
CALIBRATION_ERR	Calibration error.	Improper setup or calibration sequence; bad load cell.	Check wiring. Check with simulator. Contact your authorized Mettler Toledo representative.
Can't redim. var	JagBASIC programming error.	Once a JagBASIC application has declared a variable or an array, it can not later be re-dimensioned to a different size array.	Contact your authorized Mettler Toledo representative.
CHANGE PWCEL ERR	There was an error when attempting to change a Power Cell address.	Communications error with Power Cell.	Contact your authorized Mettler Toledo representative.
CLEAR_TARE_AT_0	According to scale setup parameters, the scale must be at gross zero in order to clear tare.	If you select Tare Interlock, the scale must be at gross zero in order to clear tare.	Contact your authorized Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
Command error	An error occurred in trying to access a file from the JagBASIC interpreter.	Most likely, you tried to access a file that does not exist. It is also possible that the file system has been corrupted	Contact your authorized Mettler Toledo representative.
BRAM Power Fail!	JagMax controller detected low power supply voltage while attempting to write permanent data to BRAM Shared Data.	You have an early version of the controller power supply or a bad power supply.	Contact your authorized Mettler Toledo representative.
CONECT_NOT_ FOUND	Serial connection not found.	Improper serial setup.	Contact your authorized Mettler Toledo representative.
CTL_EE_NO_ACCE SS	Physical error on accessing the EEPROM on the Controller Board. This EEPROM holds the calibration parameters for single-cell DigiTOL and DJBox scales.	Hardware malfunction.	Power down/up the JagMax controller. Contact your authorized Mettler Toledo representative.
DEST_NOT_CONNE CT	The remote JagMax controller that is the destination for a cluster communications message is not connected.	The remote JagMax controller that is the destination for a cluster communications message is not connected.	Contact your authorized Mettler Toledo representative.
Device error	JagBASIC programming error.	The JagBASIC program has referred to an illegal device or a device that is not open	Contact your authorized Mettler Toledo representative.
DIM not array	JagBASIC programming error	JagBASIC has attempted to dimension a variable that is not an array.	Contact your authorized Mettler Toledo representative.
Divide by zero	JagBASIC programming error.	The JagBASIC program has attempted to divide a number by zero	Contact your authorized Mettler Toledo representative.
EE A CErr - Rst? Y EE B CErr - Rst? Y	EEPROM Checksum Error. Scale calibration parameters stored on the EEPROM corrupted.	Hardware failure	Contact your authorized Mettler Toledo representative.
EE A VErr - Rst? Y EE B VErr - Rst? Y EE VERSION ERROR	Version number in the EEPROM does not match that expected by the JagMax controller operating system.	The JagMax controller scale was calibrated with an earlier version of the JagMax controller operating system.	Press **ENTER** to accept the reset default Y response. You must recalibrate JagMax controller scale.

Error Message	Description	Probable Cause	Remedy
EE Reset Error	An attempt to access the EEPROM for the selected scale has failed.	JagMax controller improperly configured with nonexistent scale devices, improperly seated scale board, or there was a hardware malfunction on the scale board.	Contact your authorized Mettler Toledo representative.
END_OF_FILE	End of File encountered while reading Shared Data.	End of File encountered while reading Shared Data.	None.
END_OF_SHIFT_ADJ	Last load cell or pair completed during shift adjust procedure.	Last load cell or pair completed during shift adjust procedure.	None.
ERROR in line	JagBASIC programming error. This message indicates the line in which the error occurred.	JagBASIC programming error. There will be an error code indicating the type of programming error.	Contact your authorized Mettler Toledo representative.
Event def error	JagBASIC programming error.	There is a programming error in defining an event.	Contact your authorized Mettler Toledo representative.
File open failed	JagBASIC programming error.	JagBASIC attempted to open a nonexistent RAM disk file or serial communications device.	Contact your authorized Mettler Toledo representative.
FOS_RESP_TIMEOUT	The Formatted Output Server (FOS) generates demand print and continuous print messages. They may be directed to a local or remote serial port. This error occurs when the FOS does not receive a response serial port driver within a specified time.	This error usually occurs when print data is directed to a remote serial port. If the ARCnet LAN is disconnected while the FOS is waiting for a response, this error may occur.	Contact your authorized Mettler Toledo representative.
Illegal command	JagBASIC programming error.	JagBASIC has issued a command that is not a legal command	Contact your authorized Mettler Toledo representative.
Incomplete line	JagBASIC programming error.	The JagBASIC program contains a line that does not have the full syntax required for a line.	Contact your authorized Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
INCRM_CHAIN_TARE	A decreasing chain tare was attempted in a market where only incremental chain taring is permitted.	Chain taring that causes a decrease in tare weight is not permitted in some markets in legal-for-trade applications. An incremental chain tare is a new tare on top of an existing tare value where the new value is greater than the old value.	Contact your authorized Mettler Toledo representative.
Internal Errors 1 Through 13	Various errors.	Programming failure, hardware failure.	Power down, then up. Contact your authorized Mettler Toledo representative.
Invalid device #	JagBASIC programming error.	The JagBASIC program is referencing a device # that is not open.	Contact your authorized Mettler Toledo representative.
Invalid SD name	JagBASIC programming error.	The JagBASIC program is referencing an invalid Shared Data name.	Contact your authorized Mettler Toledo representative.
INVALID_FILE_NAME	There was an attempt to access Shared Data with an invalid file name.	This could be caused by an internal or external access of Shared Data.	Contact your authorized Mettler Toledo representative.
LADDER_EMPTY	Discrete I/O setup error.	User attempted to delete a rung from an empty ladder .	Contact your authorized Mettler Toledo representative.
LADDER_FULL	Discrete I/O setup error	User attempted to add a rung to the ladder that is already full.	Contact your authorized Mettler Toledo representative.
Line # invalid	JagBASIC programming error.	JagBASIC contains a line number that is greater than 30000 or is a duplicate of an existing line number.	Contact your authorized Mettler Toledo representative.
Line too big	JagBASIC programming error.	A JagBASIC line is greater than 80 characters	Contact your authorized Mettler Toledo representative.
LOAD::no filename	JagBASIC programming error.	The LOAD command does not contain a file name.	Contact your authorized Mettler Toledo representative.
Memory find fail	JagBASIC programming error.	The JagBASIC program has exceeded the memory limits of the system.	Contact your authorized Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
NETWORK_XMIT_ERR	ARCnet communications transmission error.	Faulty ARCnet address, wiring, line termination, or adapter.	Contact your authorized Mettler Toledo representative.
NEXT without FOR	JagBASIC programming error.	There is a NEXT statement without the required FOR statement.	Contact your authorized Mettler Toledo representative.
No line number	JagBASIC programming error.	The program line does not have a line number.	Contact your authorized Mettler Toledo representative.
No Remote Access	JagBASIC programming error.	Program attempting to access a device in use by a serial connection or another JagBASIC program in the controller cluster.	Contact your authorized Mettler Toledo representative.
No Scale A Type No Scale B Type	Scale type definition is missing.	No scale type entered in Scale Interface menu.	Contact your authorized Mettler Toledo representative.
NO_CHAIN_TARE	User attempted to take a second or “chain” tare after a tare was already taken.	When the tare interlock is selected in setup, chain taring is illegal in certain markets.	Check the local “legal for trade” requirements. The system will continue to operate but will not allow the chain tare. Contact your authorized Mettler Toledo representative.
NO_DISCRETE_CBCK	There are no more discrete callback structures available.	The setup of this system and the JagBASIC application has exceeded this system limit.	Power down, then up. Contact your authorized Mettler Toledo representative.
NO_DMD_PRNT_CON	There is demand print connection configured in setup.	No demand print entered in “ConfigSerial, Configure Port” menu.	Contact your authorized Mettler Toledo representative.
NO_KEYBOARD_TARE	Keyboard tare disabled.	Keyboard Tare disabled in the “Application Envn, Tare Operation” setup.	Contact your authorized Mettler Toledo representative.
NO_PUSHBUTT_TARE	Pushbutton tare disabled.	Pushbutton Tare disabled in Application Envn, Tare Operation setup.	Contact your authorized Mettler Toledo representative.
NO_PWCEL_OLD_ADR	POWERCELL re-addressing error.	When re-addressing a POWERCELL, none was found at the old address. Or, invalid address entered or POWERCELL communications error occurred.	Contact your authorized Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
NO_SECOND_UNITS	Secondary units not specified.	No secondary units selected in “Application Envn, Alt Weight Units” mode setup.	Contact your authorized Mettler Toledo representative.
OFF LINE ERROR	JagMax controller on ARCnet network not responding	Loss of communication between JagMax controllers	Contact your authorized Mettler Toledo representative.
ON no GOSUB	JagBASIC programming error	ON statement is present without required GOSUB.	Contact your authorized Mettler Toledo representative.
Oper. File Error	Cannot read language messages file.	Unexpected operation.	Power down, then up. Contact your authorized Mettler Toledo representative.
OPTION BASE->DIM	JagBASIC programming error.	The JagBASIC program must define the OPTION BASE before dimensioning an array.	Contact your authorized Mettler Toledo representative.
Out of data	JagBASIC programming error.	The JagBASIC program has issued more READ commands to initialize system variables than there is data specified in DATA statements	Contact your authorized Mettler Toledo representative.
OUT_OF_COMM_BUFS	Cluster communications error.	The system has exceeded the fixed limit on the number of communication buffers that can be used at one time. Most likely one JagMax controller is sending messages to a second JagMax controller faster than the second JagMax controller can process them	Power down, then up. Contact your authorized Mettler Toledo representative.
OUT_OF_MEMORY	The JagMax controller software cannot get the dynamic memory it needs to continue running.	The system is using more dynamic “heap” memory than is available or the heap memory has become fragmented.	Contact your authorized Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
OUT_OF_ZERO_RANG	Operator has attempted to zero the scale outside of the legal zeroing range.	The zeroing limits are set up in the “Application Envn, Zero Operation” menu.	Contact your authorized Mettler Toledo representative.
Overflow	JagBASIC programming error.	A JagBASIC program causes an overflow error by exceeding certain system limits. In particular, the maximum size of the “gosub” stack, the “for-next” stack, and the “while-wend” stack is 9 entries each. Then, for example, if you try to nest subroutines more than 9 entries deep, you will get an Overflow error. Overflow errors can also be caused by particular language syntax errors	Contact your authorized Mettler Toledo representative.
PRINT REQUESTED	The operator has re- quested a Demand Print through the Control Panel.	None.	None.
PRINT_IN_PROGRES	The operator has requested a second demand print while the first is in progress.	None.	None.
PRINT_NOT_READY	Scale is in motion while attempting to print.	None.	None.
Program too big	JagBASIC programming error.	The program exceeds 300 text lines or 15KB. This error can also occur while you are typing in a JagBASIC program at they JagMax controller when the temporary program buffer becomes full.	Contact your authorized Mettler Toledo representative.
PWC_PROTOCOL_ERR PWC_TIMEOUT_ERR PWC_UNDEFIND_ERR PWC_BUFF_OVFLOW	Communication Error between controller card and POWERCELL card.	Bad POWERCELL card.	Contact your authorized Mettler Toledo representative.
PWC_CHECKSUM_ERR	Checksum error on firmware on POWERCELL card	Bad POWERCELL card.	Contact your authorized Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
PWC_EEPROM_ACCES	Unable to access EEPROM on POWERCELL card	Bad POWERCELL card	Contact your authorized Mettler Toledo representative.
PWC_EEPROM_ERR PWC_EEPROM_CHECK	Checksum error on power scale calibration data stored on EEPROM on POWERCELL card.	New version of JagMax controller software. Hardware failure caused corruption of EEPROM data.	Contact your authorized Mettler Toledo representative.
PWC_NO_ERROR PWC_NO_ERROR2	None.	None.	None.
PWC_RAM_ERR	RAM memory error on POWERCELL card.	Bad POWERCELL card	Contact your authorized Mettler Toledo representative.
PWCEL_AT_NEW_ADR	You attempted to re-address a POWERCELL to a new address that already exists on the POWERCELL network.	Your addressing procedure for the POWERCELLs has created duplicate addresses.	Contact your authorized Mettler Toledo representative.
PWCEL_BAD_FMT	The format of the data from the remote POWERCELL is invalid.	Most likely, this is a communication error or power supply problem for the remote POWERCELLs. Bad remote POWERCELL.	Contact your authorized Mettler Toledo representative.
PWCEL_EEP_ERR	The remote POWERCELL has reported a checksum error in its EEPROM	Bad remote POWERCELL.	Contact your authorized Mettler Toledo representative.
PWCEL_NEG_RNG	The weight reported by a remote POWERCELL is in the negative weight range.	Bad remote POWERCELL.	Contact your authorized Mettler Toledo representative.
PWCEL_NO_DATA	No weight data is being reported by a remote POWERCELL.	Most likely, this is a communication error or power supply problem for the remote POWERCELLs. It could also be caused by a bad remote POWERCELL.	Contact your authorized Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
PWCEL_NO_RESP	The remote POWERCELL is not responding to polls from the JagMax controller.	Most likely, this is a communication error or power supply problem for the remote POWERCELLs. It could also be caused by a bad remote POWERCELL.	Contact your authorized Mettler Toledo representative.
PWCEL_ROM_ERR PWCEL_RAM_ERR	The remote POWERCELL is reporting an error in its local memory.	Bad remote POWERCELL.	Contact your authorized Mettler Toledo representative.
PWCEL_RESTART	The JagMax controller has restarted a remote POWERCELL after the POWERCELL has not responded with valid data.	Most likely, this is a communication error or power supply problem for the remote POWERCELLs. It could also be caused by a bad remote POWERCELL.	Contact your authorized Mettler Toledo representative.
Record not found	JagBASIC programming error.	A record specified in GET statement for an indexed sequential file could not be found in the file.	Contact your authorized Mettler Toledo representative.
REPORT NET ERR	There was a network error in attempting to print a demand print, continuous print, or setup report.	This error typically occurs when the demand print or continuous print is directed to a remote JagMax controller. It occurs when ARCnet network messaging fails.	Contact your authorized Mettler Toledo representative.
Resource in use	JagBASIC programming error.	JagBASIC tried to access a system resource already in use by another JagMax controller task. JagBASIC cannot open a serial port assigned to a serial port connection in setup. When two or more JagBASIC applications are sharing a remote serial port, only one application can have the port open at a time.	Contact your authorized Mettler Toledo representative.
RETURN no GOSUB	JagBASIC programming error.	RETURN statement is present without required GOSUB	Contact your authorized Mettler Toledo representative.
SCALE_IN_MOTION	Scale in motion. This is normal and not necessarily an error.	Motion on the scale during taring or zeroing the scale	Try mechanical methods to stabilize the base. Contact your Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
SCALE_UNDER_ZERO	The scale gross weight has gone more than “n” divisions below the current zero. The default “n” is 5, but it can be adjusted in setup.	The zero value for the scale could have been reset by hitting the zero button. There could be a connection problem to the base, particularly, with an analog base.	Contact your authorized Mettler Toledo representative.
SCL_OVERCAPACITY	The weight on the scale exceeds the calibrated capacity of the scale by more than 5 divisions.	There is too much weight on the scale based on calibration parameters.	Reduce the weight on the scale.
SD string > max.	JagBASIC programming error.	JagBASIC can only access Shared Data fields whose length is less than the maximum JagBASIC string size of 80 bytes.	Contact your authorized Mettler Toledo representative.
SD_BAD_BUFFER	There was an invalid access to Shared Data	A Shared Data access request provided a buffer that is not long enough.	Contact your authorized Mettler Toledo representative.
SD_WRITE_DISABLE	There was an invalid access to Shared Data.	An external agency attempted to access a protected Shared Data field in legal-for-trade mode.	Contact your authorized Mettler Toledo representative.
SER CONST ERROR	The JagMax controller could not start or restart a logical serial connection.	JagMax controller software error.	Power down, then up. Contact authorized Mettler Toledo representative.
SER_BUFFER_FULL	The JagMax controller demand print buffer is full.	JagMax controller software error.	Power down, then up. Contact authorized Mettler Toledo representative.
SER_IN_TIMEOUT	There was a timeout waiting for serial input.	Most likely, the serial device talking to the JagMax controller is has not sent the required input to the JagMax controller. This could also be caused by communication errors.	Contact your authorized Mettler Toledo representative.
SER_MSG_SEQ_ERR	There was an error in the sequencing of demand print messages.	Most likely, when one JagMax controller is printing at a remote JagMax controller, a message was lost in the ARCnet communications	Contact your authorized Mettler Toledo representative.

Error Message	Description	Probable Cause	Remedy
SERIAL_MSG_ERRO R	The Serial Services software modules got an invalid request.	JagMax controller software error.	Power down, then up. Contact authorized Mettler Toledo representative.
SETPOINT_NO_RAT E	User has configured a rate setpoint, but not a rate calculation.	Rate calculation not configured.	Contact your authorized Mettler Toledo representative.
SHIFT_ADJUST_ERR OR	The shift adjustment factors could not be calculated.	The weight placements during the shift adjust procedure was incorrect.	Contact your authorized Mettler Toledo representative.
SPX_NET_ERROR	SPX returned a network error status	Problem with the ARCnet wiring.	Contact your authorized Mettler Toledo representative.
Syntax error	JagBASIC programming error.	The JagBASIC program has a syntax error.	Contact your authorized Mettler Toledo representative.
TARE_ABOVE_LIMIT	Tare value exceeds the allowed limit.	In a legal for trade environment in some markets, the tare value cannot exceed the highest weight in the lowest range of a multi-range scale.	Contact your authorized Mettler Toledo representative.
TARE_TOO_SMALL	Pushbutton tare value is less than one division.	Weight on scale must be at least one division when taking Pushbutton tare.	Must have at least one division of weight before taking pushbutton tare.
TARE_UNDER_ZERO	Attempted to take tare when scale is under zero and has an invalid weight.	Cannot take tare when scale is under zero.	Make sure scale has valid weight before taking tare.
TEMPLATE_ERROR	Template error.	Error detected in template configuration.	Contact your authorized Mettler Toledo representative.
Too many dimens.	JagBASIC programming error.	JagBASIC arrays can have at most three dimensions	Contact your authorized Mettler Toledo representative.
TOO_SMALL_INCRM T	Increment size is too small.	Scale increment size too small. You are asking for more resolution than the scale base can support.	Contact your authorized Mettler Toledo representative.
Type mismatch	JagBASIC programming error.	JagBASIC using an invalid data type or is relating two incompatible data types.	Contact your authorized Mettler Toledo representative.
Error Message	**Description**	**Probable Cause**	**Remedy**
Undefined funct.	JagBASIC programming error.	The JagBASIC statement is referring to an undefined function.	Contact your authorized Mettler Toledo representative.

Value out range	JagBASIC programming error.	The JagBASIC statement is referring to a value out of the range of acceptable values.	Contact authorized Mettler Toledo representative.
WRONG SCALE MODE	Zeroing scale in net mode.	User attempted to zero the scale in net mode.	Clear tare to put scale in gross mode before zeroing scale.
ZERO_NOT_CAPTURED	Tare attempted before power up zero value was captured.	Tare attempted before power up zero value was captured.	Contact authorized Mettler Toledo representative.

6 Appendices

Appendix 1: Print Reports

The following are sample print reports that can be generated using the JagMax controller.

Audit Trail Report

```
<Audit Trail Sample>
     1 04:12 07/02/98 FIRST            01    1.50  19510               lb
 15510   4000
FIRST COMMENT
     2 04:12 07/02/98 SECOND           51    1.00  18370               lb
 10370   8000
SECOND COMMENT
     3 04:13 07/02/98 THIRD            03    3.50 113000               lb
 10000  19000  12000  14000  12000   8000  16000  14000   8000
THIRD COMMENT
     4 04:15 07/02/98 FOURTH           04    4.50  87160               lb
 18100   8000  12000  16000  18100  14960
FOURTH COMMENT
     5 04:17 07/02/98                  53    1.00  56090               lb
 12090   8000  14000  12000  10000
FIFTH COMMENT
     6 04:18 07/02/98 SIXTH            54    1.00  74200               lb
 10960   8000  12000  14000  15600  13640
SIXTH COMMENT
     7 04:19 07/02/98 SEVENTH          05    5.50  19030               lb
 11030   8000
SEVENTH COMMENT
     9 04:21 07/02/98 NINTH            07    7.50  18660               lb

NINTH COMMENT
    10 04:22 07/02/98 TENTH            08    8.50         21450        lb

TENTH  COMMENT
    12 04:23 07/02/98 ELEVEN           06    6.50  25240  23760   1480 lb

ELEVEN, OUTBOUND
<Audit Trail Sample>
```

Audit Trail Description
A transaction is three lines if comments are enabled for the mode used, two lines if comments are disabled.
One space between fields.
<CR> <LF> at end of each line.
No blank lines between transactions.

Line 1

Field	Length	Format
Ticket	6	N
Time	5	HH:MM
Date	8	MM/DD/YY
ID	16	A
Mode	2	01,03,04,05,06,07,08,51,53,54
Fee	7	$
Gross	6	N
Tare	6	N
Net	6	N
Weight Units	2	lb,kg,g

Line 2

Field	Length	Format
Axle 1	6	N
Axle 2	6	N
Axle 3	6	N
Axle 4	6	N
Axle 5	6	N
Axle 6	6	N
Axle 7	6	N
Axle 8	6	N
Axle 9	6	N

Line 3 (Included only if comments are enabled for the current mode.)

Field	Length	Format
Comment	45	A

Transaction Report

<Transaction Report Sample>

Ticket	Time	Date	ID	Md	Fee	Gross	Tare	Net	WU
Axle 1	Axle 2	Axle 3	Axle 4	Axle 5	Axle 6	Axle 7	Axle 8	Axle 9	V
1	04:12	07/02/98	FIRST	01	1.50	19510			lb
15510	4000								0
2	04:12	07/02/98	SECOND	51	1.00	18370			lb
10370	8000								0
3	04:13	07/02/98	THIRD	03	3.50	113000			lb
10000	19000	12000	14000	12000	8000	16000	14000	8000	0
4	04:15	07/02/98	FOURTH	04	4.50	87160			lb
18100	8000	12000	16000	18100	14960				0
5	04:17	07/02/98		53	1.00	56090			lb
12090	8000	14000	12000	10000					0
6	04:18	07/02/98	SIXTH	54	1.00	74200			lb
10960	8000	12000	14000	15600	13640				0
7	04:19	07/02/98	SEVENTH	05	5.50	19030			lb
11030	8000								0
9	04:21	07/02/98	NINTH	07	7.50	18660			lb
									0
10	04:22	07/02/98	TENTH	08	8.50		21450		lb
									0
12	04:23	07/02/98	ELEVEN	06	6.50	25240	23760	1480	lb
									0

<Transaction Report Sample>

Transaction Report Description

First four lines are column headings, followed by one blank line.
Each transaction is two lines.
Spacing between columns varies.
One blank line between transactions.
<LF> <CR> at end of each line.

Line 1

Field		Length	Format
Ticket	6		N
Time		5	HH:MM
Date		8	MM/DD/YY
ID		16	A
Mode		2	01,03,04,05,06,07,08,51,53,54
Fee		7	$
Gross		6	N
Tare		6	N
Net		6	N
Weight Units	2		lb,kg,g

Line 2

Field		Length	Format
Axle 1	6		N
Axle 2	6		N
Axle 3	6		N
Axle 4	6		N
Axle 5	6		N
Axle 6	6		N
Axle 7	6		N
Axle 8	6		N
Axle 9	6		N
Void		1	0,1

In-Process Report

<In-Process Report Sample>

```
Ticket Time  Date     ID              Weight WU
------ ----- -------- --------------- ------ --

     8 04:20 07/02/98 EIGHTH           16430 lb

    13 04:25 07/02/98 TWELVE           24350 lb
```

<In-Process Report Sample>

In-Process Report Description

First two lines are column headings, followed by one blank line.
Each In-Process transaction is one line.
One space between columns.
One blank line between In-Process transactions.
<LF> <CR> at end of each line.

Line 1

Field		Length	Format
Ticket	6		N
Time		5	HH:MM
Date		8	MM/DD/YY
ID		16	A
Weight (Gross)		6	N
Weight Units	2		lb,kg,g

Accumulation Report

<Accumulation Report Sample>

Category	Mode #	Count	$ Total
Weigh	01	2	3.00
Re-Weigh	51,53,54	3	3.00
Double	03	1	3.50
Triple	04	1	4.50
Moving Van	05	1	5.50
ID	06	1	6.50
Gross	07	1	7.50
Tare	08	1	8.50
Total Trans	All	11	42.00
Blind		0	

<Accumulation Report Sample>

Accumulation Report Description

Format as shown above.
'Count' and '$ Total' values are the only fields which change.
<LF> <CR> at end of each line.

Field	Length	Format
Count	8	N
$ Total	9	$

METTLER TOLEDO

Publication Evaluation Report

If you find a problem with our documentation, please complete and fax this form to (614) 438-4355

Publication Name: JagMax Truck Scale Controller User's Guide – CAT Version

Publication Part Number:15572000A **Publication Date: 8/98**

PROBLEM(S) TYPE:	DESCRIBE PROBLEM(S):	*INTERNAL USE ONLY*
☐ **Technical Accuracy**	☐ **Text** ☐ **Illustration**	
☐ **Completeness** **What information is missing?**	☐ **Procedure/step** ☐ **Illustration** ☐ **Definition** ☐ **Example** ☐ **Guideline** ☐ **Feature** ☐ **Explanation** ☐ **Other (please explain below)**	☐ ***Info. in manual*** ☐ ***Info. not in manual***
☐ **Clarity** **What is not clear?**		
☐ **Sequence** **What is not in the right order?**		
☐ **Other Comments** **Use another sheet for additional comments.**		

Your Name: _____ **Location:** _____

Phone Number: **( )** _____

Fax this completed form to Light Capacity Industrial Marketing at (614) 438-4355

METTLER TOLEDO
Scales & Systems
1150 Dearborn Drive
Worthington, Ohio 43085

P/N: 15572000A
(8/98)

*1557200