MODEL 8582 COUNTING SCALE
TM008582 I00 TECHNICAL MANUAL ADDENDUM

8582 Counting Scales are now being shipped with enhanced features. This addendum is a supplement to the technical manual shipped with the 8582 and explains the added features and how to select these features during setup. Keep this addendum with the 8582 technical manual, part number TM008582 I00.

[F2.7 N] ENHANCED APW REPEATABILITY

YES- The Enhanced APW Repeatability feature is enabled. Enabling this feature ensures maximum APW accuracy and repeatability. When sampling, the APW calculation will be delayed for approximately two seconds.

NO - Enhanced APW Repeatability is disabled.

[F4.9 OFF] SINGLE DATA REGISTER ENABLE

YES- The displayed selection is accepted as the field to be accumulated in the single data register.

NO - This advances the display to the next selection each time the key is pressed.

CHOICE	DESCRIPTION
OFF	The Single Data Register is disabled.
GRS	Gross weight will be accumulated.
NET	Net weight will be accumulated.
CNT	Piece count will be accumulated.

[F4.10 N] CLEAR ACCUMULATOR ?

YES- The Single Data Register will automatically clear to 0 after the total has been printed.

NO - The Single Data Register will not clear to 0 after a total print and must be cleared manually.

[F5.10 N] USE FILE TARE ?

YES- The tare value stored in step [F5.8] for a particular part number will be accessed and used (putting the scale into the NET mode) when that part number is entered as ID1.

NO - The tare value stored in the Inventory file will not be accessed for counting purposes.

[F5.11 N] USE FILE APW ?

YES- The value entered for APW in step [F5.7] will be accessed and used for counting when a valid part number has been entered. The setup will advance to step [F5.13].

NO - The APW value stored in the Inventory file will not be accessed for counting purposes.

F5.12 N] ENABLE APW TOLERANCE CHECK ?

YES- The 8582 will reference the file APW value from step [F5.7] and check to see if the calculated APW from an actual piece count is within a specified tolerance ([F5.12]).

NO - There will be no tolerance check on a calculated APW value.

[F5.12 1.0] SELECT APW TOLERANCE VALUE ?

This step selects the acceptable tolerance limit for APW when step [F5.12] is enabled. The four valid selections are 0.2%, 1.0%, 2.0% and 5.0%. The selected percentage is the percent of the stored APW that the calculated APW is allowed to vary. Variations greater than the selected value will initiate an error display of [APW CHECK FAIL] which may be accepted by pressing ENTER or refused by pressing any other key.

YES- This accepts the displayed value as the desired tolerance.

NO - This key updates the display to alternate selections. Multiple depressions will continue to toggle between 0.2%, 1.0%, 2.0% and 5.0% until YES or ENTER is pressed.

[F5.13 N] STORE TARE AND APW ?

YES- When a new ID (one that does not already exist in memory) is entered and a count completed, the tare and APW values from that count will be stored along with that ID (if it is added) in the inventory file.

NO - The tare and APW values from a count sequence will not be stored with a new ID.

[F5.14 N] TRANSACTION BUFFER ENABLE ?

YES- This will format the memory of the 8582 for a transaction buffer and not an inventory file.

NO - This disables the transaction buffer feature of the 8582.

[F6.2 0.01] SELECT SCALE 1 INCREMENT SIZE?

This step selects the increment size and decimal point location for scale 1. The increment size and decimal point location are selectable only from the values shown in the capacity chart (see step [F6.3]).

Refer to the chart in Section III, Part E for the recommended increment size and capacity for the Model 8582 desk unit.

YES- This accepts the displayed selection as the choice for scale 1 and the 8582 will proceed to the next step.

NO - This toggles the display to the next selection when one is available.

[F6.5 0] FILTERING SELECTION

Filtering minimizes the effects of vibration or motion in the area that the 8582 is installed in, the ideal result being a stable (non-fluctuating) weight display. Filtering will slow the update of the weight display. Selections should be sampled at installation starting with "0 - No filtering" until the required display stability is achieved. Selections are:

Selection	Description
0	No filtering
1	Light filtering
2	Heavy filtering

YES- This accepts the displayed value as the filtering rate.

NO - This advances the display to the next selection.

[F6.6 N] ANALOG VERIFICATION

Analog verification, if selected, tests the internal and any external digital load cell and is performed approximately every 4 hours. If verification fails an error message of [SCL X AV FAIL] is displayed. The operator must then press the CLEAR key. The 8582 will disable scale 1 but still permit operation with any remote scales.

YES- Analog verification is enabled.

NO - Analog Verification is disabled.

NOTE: Enabling Analog Verification affects how the weight fields are transmitted. Truly measured weights will be enclosed in <brackets>. European time and date format will also be automatically selected.

[F6.7 N] TARE INTERLOCK ENABLE

Selecting tare interlock enables the following restrictions:

Tare can only be entered when the scale is in the gross weight mode.
Tare can only be cleared at gross zero.
Keyboard tare can only be entered at gross zero and must be entered in whole increment values including all positions to the right of the decimal point.
The sample/gross scale cursors are not turned off to indicate motion on the scale.
The zero pushbutton range is limited to +/- 2% of scale capacity.

YES- Enables tare interlock.

NO - Disables tare interlock.

[F7.5 N] MEMORY I/O PCB PRESENT ?

YES- The optional Memory I/O PCB has been installed in the 8582 and the memory on this PCB will be continuously tested.

NO - The optional Memory I/O PCB has not been installed.

[F7.6 N] **ENABLE SETPOINT OUTPUT ?**

NOTE: This step will be skipped if neither port I/O 1 or I/O 2 are selected as "REMT" (remote display) option.

⚠ WARNING !

IF THIS DEVICE IS USED IN AN AUTOMATIC OR MANUAL FILLING CYCLE, ALL USERS MUST PROVIDE A HARD WIRED EMERGENCY STOP CIRCUIT OUTSIDE THE DEVICE CIRCUITRY. FAILURE TO OBSERVE THIS PRECAUTION COULD RESULT IN BODILY INJURY.

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⚠ WARNING !

WHEN THIS EQUIPMENT IS INCLUDED AS A COMPONENT PART OF A SYSTEM, THE RESULTING DESIGN MUST BE REVIEWED BY QUALIFIED PERSONNEL WHO ARE FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF ALL COMPONENTS IN THE SYSTEM AND THE POTENTIAL HAZARDS INVOLVED. FAILURE TO OBSERVE THIS PRECAUTION COULD RESULT IN BODILY INJURY.

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YES- The I/O port selected as "REMT" (remote display option) will output data per the continuous setpoint data format. The baud rate is 4800 for the setpoint output.

NO - The continuous setpoint data output is disabled.

The following chart shows the format for the continuous setpoint output.

CONTINUOUS SETPOINT DATA FORMAT

Sequence of Characters Transmitted

1	2	3	4	5-6-7-8-9-10	11-12-13-14-15-16	17	18
STX	Status Word A	Status Word B	Status Word C	Six Digits of Count	Six Zeroes (30H)	CR	CKSM

Start of Text (02H)

Carriage Return (0DH)

Checksum Character

Bit No.	Status Word A	Status Word B	Status Word C
0	Always a 0	Always a 0	Always a 0
1	Always a 1	Negative Count = 1	Always a 0
2	Always a 0	Out of Range = 1	Always a 0
3	Setpoint 1 Feeding = 0	Motion = 1	Print Request = 1
4	Setpoint 2 Feeding = 0	Always a 0	Always a 1
5	Always a 1	Always a 1	Always a 1
6	Always a 1	Always a 1	Always a 1

[F9.5 N] MULTILINE PRINTER FORMAT ?

YES- The 8582 will output the data fields selected in step [F9.6] each on a separate line.

NO - The 8582 will output all the data fields selected in step [F9.6] on one single line.

NOTE: When using the 307 Printer, checksum must be enabled and multiline print must be off.

[F9.6 PRINT FIELDS] ENTER NEW PRINT FIELDS ?

YES- The 8582 will display the code numbers of the fields selected to be printed.

NO - The 8582 will proceed to step [F9.7].

[F9.6 FLD = 712345] PRINT FIELDS

This step selects the data fields that the 8582 will transmit. Up to eight fields may be selected in any combination.

0 through 9 - To enter the code number for the fields to be printed. The code for each field is shown in the following chart.

ENTER - To accept the fields displayed.

DATA FIELD CODES

CODE	FIELD
0	Displayed weight
1	Gross weight
2	Tare weight
3	Net weight
4	APW or PCS/WGT
5	Piece count
6	Sample pieces
7	ID (1-4 lines according to the ID format selected in step [F4.2])
8	Time and Date (If selected in step [F3])
9	Blank line for multiline print [F9.5 Y] or spaces between fields for single line print [F9.5 N].

[F9.7 Y] PRINT ALL FILE RECORDS ?

YES- All inventory records will print when the inventory file is printed.

NO - Print only files that have added to or changed the accumulator contents since the last total print.

[F9.8 N] PRINT ID EXPANDED ?

YES- The ID field will print expanded if the printer is capable of doing so when an ASCII "SO" character is received.

NO - The output will not have the ASCII character "SO" to initiate an expanded print of ID.

[F9.9 N] PRINT NET EXPANDED ?

YES- The net weight will print expanded if the printer is capable of doing so when an ASCII "SO" character is received.

NO - The output will not have the ASCII character "SO" to initiate an expanded print of net weight.

[F9.10 Y] PRINT COUNT EXPANDED ?

YES- The count field will print expanded if the printer is capable of doing so when an ASCII "SO" character is received.

NO - The output will not have the ASCII character "SO" to initiate an expanded print of count.

[F9.11 N] ENABLE REPEAT PRINT ?

YES- To enable the repeat print feature.

NO - To disable the repeat print feature.

[F9.12 N] ENABLE AUTOPRINT ?

YES- The 8582 will automatically transmit the chosen fields to the printer when a piece count is completed (a new piece count is displayed with no motion present on the scale).

NO - The autoprint feature will be disabled.

OPERATION OF THE SINGLE DATA REGISTER

A single data register is provided for accumulating gross weight, net weight or piece count, selectable in setup step [F4.9]. Accumulation is done by pressing the FUNCTION key followed by the "+" key, use of the host "M<CR>" command, or indirectly by the accumulate on print function, similar to accumulating a piece count into the inventory file mode. When an accumulation is done, the data display blanks and the TOTAL cursor will blink. If the inventory file is enabled and an ID has been entered, accumulation is done into the inventory file record as well, causing the TOTAL cursor to blink a second time.

Accumulation may only be done once while upscale in the parts counting mode. Accumulation is also done in the same fashion while not in the parts counting mode, though the display does not lock when the accumulation is done and multiple accumulations may be done. This applies only when the accumulator is selected for net or gross weight.

Weight accumulators are nine digits and the count accumulator is eight digits. If the data register overflows, the message [TRANS ACC OVR] is displayed. Press any key to continue operation. The accumulator is marked as having overflowed and rolls over.

Recalling

If the single data register is selected, the current value may be displayed by pressing the FUNCTION key followed by the PRINT key. The TOTAL cursor will be lit to indicate this is the single data register. A "*" will be displayed with the value if an overflow condition has occurred. The host "R<CR>" command may be used to access the accumulator also.

Printing

The single data register may be printed with the currently entered ID field(s). The accumulator must be recalled as described previously and the PRINT key must be pressed a second time. The accumulator value will be followed by a "*" if overflow has occurred.

Clearing

The single data register may be cleared in three ways, by pressing the number "0" key while the accumulator is being recalled on the display, or by using the host "H<CR>" command, or by enabling the accumulator clear setup step [F4.10] to clear the register after printing the total.

NOTE: When a scale select function is actuated, the accumulator register will be cleared.

OPERATIONAL NOTES

1. When an ID is entered and either I/O 1 or I/O 2 is selected as host, and <ENQ> character is sent to the host to serve as a means of getting the hosts attention to upload the entered ID and have the host send down the corresponding APW and tare.

2. The 8582's internal file memory no longer must be cleared in order to add the optional Memory-I/O 2 kit.

3. The baud rate utilized for TLAN communication has been changed to 62.5K baud. This requires the installation of the W14 jumper on the TLAN PCB. Previous revisions of 8582 software cannot be used with this revision in the same multidrop network.

4. Pressing the APW key when [sample = XXX] is displayed will switch the entry mode to allow entry of an APW. Pressing the SAMPLE key when [APW ?] is displayed will switch the entry mode to allow sampling on the scale.

5. When tare interlock is disabled [F6.7 0], the pushbutton zero capture range has been expanded to 20 % of scale capacity.

NEW ERROR MESSAGES

[OPT FILE MEM ERR]	An error was found in one or more of the expanded RAM chip the appropriate chip has been disabled. Press any key to continue. This reduces the availabe RAM space accordingly.
[SCL X BOARD ERROR]	Scale X PCB memory error. This indicates a failure on the re scale PCB and the defective PCB must be replaced.
[AAAA MATH OVERFLOW]	Math calculation overflow error usually due to lost scale calibration parameters. Enter setup and recalibrate. If the error continues, replace the Logic PCB.

TOLEDO SCALE

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