NATIONAL STANDARDS COMMISSION

WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/4D/84

This is to certify that an approval has been granted by the Commission that the pattern and variants of the

Toledo Model 8403 Weighing Instrument

submitted by Toledo Scale (Australia) Ltd
525 Graham Street
PORT MELBOURNE, VICTORIA, 3207

are suitable for use for trade.

This approval will expire in respect of new instruments on 1/9/83 (instruments which are verified on or before that date may, with the concurrence of the State or Territorial verifying authorities, be submitted for reverification).

Instruments purporting to comply with this approval shall be marked NSC No 6/4D/84.

Relevant drawings and specifications are lodged with the Commission.

Signed
Raymond Slade
Acting Executive Director

Descriptive Advice

Pattern: approved 28/8/78

- Capacity 6.01 kg by 0.002 kg scale intervals with price computing in 1c increments to $799.99/kg, total price to $999.99, with Toledo model 0721 11 kg load cell.

Variants: approved 28/8/78

1. With unit price cancelling only when the C button is pressed.
2. With the keyboard located up to 1 m from the weighing instrument.
3. With a data cable for peripheral equipment.

Variants: approved 15/1/79

4. Capacity 15.025 kg by 0.005 kg scale intervals, with Toledo model 0721 22 kg load cell and price computing as for the pattern.
5. Either the 6.01 kg or 15.025 kg instrument with price computing in 1c increments to $99.99/kg and price to $99.99.
6. The 6.01 kg instrument with price computing in 1c increments to $99.99/kg and price to $600.94.
7. The 15.025 kg instrument with price computing in 1c increments to $99.99/kg and price to $999.99.

8. The 6.01 kg instrument with Toledo model 0723 11 kg load cell replacing the model 0721 load cell.

9. With semi-automatic tare of maximum value of 6.01 kg (6.01 kg instrument) or 9.995 kg (15.025 kg instrument).

10. The instrument with semi-automatic tare, and with a Toledo model 300 label printer, as a prepackaging weighing instrument.

11. The instrument without tare and with a Toledo model 300 ticket printer, as a retail counter machine.

Variant: approved 9/3/79

12. The 15.025 kg instrument with Toledo model 0723 22 kg load cell replacing the model 0721 load cell.

Variant: approved 22/3/79

13. The instrument as a retail counter machine without tare, with a Toledo model 300 printer printing price only.

Variant: approved 6/8/79

14. The prepackaging instrument with Toledo model 3000 label printer replacing the model 300 printer.

15. The retail instrument with Toledo model 3000 ticket printer replacing the model 300 printer; the printer may print unit price, mass and total price, or price only.

Variants: approved 11/1/80

16. Of capacity 9.995 kg by 0.005 kg without price computing and with separate indicator; known as model 8211.

17. Of capacity 15.025 kg by 0.005 kg without price computing and with separate indicator; known as model 8211.

Variant: approved 1/4/82

18. Model 8211 weighing instrument with maximum capacity of 9.995 kg or 15.025 kg connected to any cash register complying with Certificate of Approval No S2/0.

Technical Schedule No 6/4D/84 and its Variations Nos 1 to 6 describe the pattern and variants 1 to 18.

Variant: approved 26/4/83

19. With an alternative remote indicator with the VERIFY function transferred to the weighing unit.

Technical Schedule No 6/4D/84 Variation No 7 dated 19/5/83 describes variant 19.

Filing Advice

Certificate of Approval No 6/4D/84 dated 19/4/82 is superseded by this Certificate and may be destroyed.

Table 1 dated 31/1/80 should be re-numbered as Table 7.

Technical Schedule Variation No 6 dated 19/4/82, Description of Variant 18, the first sentence should be changed to read;

> "Toledo model 8211 weighing instrument connected to any cash register complying with Certificate of Approval No S2/0."

The documentation for this approval now comprises:

Certificate of Aproval No 6/4D/84 dated 19/5/83
Technical Schedule No 6/4D/84 dated 12/9/78 (including Table 1 and Special Tests)
Technical Schedule No 6/4D/84 Variation No 1 dated 6/2/79 (including Tables 2 to 6 and Special Tests)
Technical Schedule No 6/4D/84 Variation No 2 dated 23/3/79
Technical Schedule No 6/4D/84 Variation No 3 dated 19/4/79
Technical Schedule No 6/4D/84 Variation No 4 dated 28/8/79 (including Test Procedure)
Technical Schedule No 6/4D/84 Variation No 5 dated 31/1/80 (including Table 7 and Test Procedure)
Technical Schedule No 6/4D/84 Variation No 6 dated 19/4/82
Technical Schedule No 6/4D/84 Variation No 7 dated 19/5/83
Figures 1 to 4 dated 12/9/78
Figures 5 to 9 dated 6/2/79
Figures 10 to 12 dated 28/8/79
Figures 13 and 14 dated 31/1/80
Figure 15 dated 19/5/83.

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4D/84

Pattern: Toledo Weighing Instrument Model 8403

Submittor: Toledo-Berkel Pty Ltd,
525 Graham Street,
Port Melbourne, Victoria, 3207.

Date of Approval: 28 August 1978

All instruments conforming to this approval shall be marked "NSC No 6/4D/84".

Description:

The pattern is a self-indicating price-computing weighing instrument (see Figures 1 and 2) of capacity 6,10 kg by 0,002-kg scale interval with price computing in 1-c increments from 1c to $799,99/kg and price to $999,99. Weight, unit price and price are digitally indicated on both the vendor's and purchaser's sides of the instrument. The unit price is entered sequentially by ten push-buttons and cancelled automatically when the weight indicated is below 0,02 kg or when the "C" (Clear) button is pressed.

The load receptor is supported by a Toledo 11-kg cantilever load-cell - resistant mechanism and stayed by five flexure plates (see Figure 3).

The instrument will rezero automatically whenever the instrument comes to rest within 0,5 scale interval of zero; this is indicated by the word "zero" being illuminated. A press-button marked "Z" is provided for rezeroing the instrument when the zero has changed by more than 0,5 scale interval.

The instrument is provided with a level indicator and adjustable feet. Adjacent to the level indicator is a notice advising that the instrument must be level when in use.

Successive operations of the "C" button can be used to blank out the indicator or display "all-8" while the button is depressed. This checks that the display is working correctly.

A lead-plug seal retains the cover on the instrument. A plate covering the bottom of the instrument is secured in position by bolts which are only accessible from inside the instrument.

The instrument is marked adjacent to each weight indicator:

(III)

Max	=	6,01 kg
Min	=	0,04 kg
$d_d = e$	=	0,002 kg

The approval includes:

1. The unit price cancelling only when the "C" button is pressed.

2. The keyboard located up to 1 metre from the weighing instrument (see Figure 4); the interconnecting cable is internally connected within the instrument.

3. A data cable on the Toledo 8403 weighing instrument may provide data to peripheral devices which are not part of the measuring instrument.* These devices, which may only be provided with the authorisation of the Weights and Measures Authority of the State, may, for example, store and process the data, or print the weight, etc.

Special Tests:

As the instrument is fitted with zero-drift tracking, the application of cumulative loads should not exceed five minutes' duration. Periodic removal of the load will allow the instrument to rezero and thus more closely simulate actual usage.

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* The measuring instrument examined and approved by the Commission is limited to the devices which determine and indicate the value of a physical quantity, the devices which calculate price and in the presence of the purchaser or the vendor indicate price, the devices which print the value of the physical quantity together with the price, and the devices which control the measurement or price calculation. A device which receives weight data from the output socket and calculates price, and in the presence of the purchaser or vendor indicates or prints price, is a part of the measuring instrument which requires approval by the Commission.

1. Zero test — as the automatic device resets zero when the weighing mechanism is in equilibrium within 0,5 scale interval of zero, zero should be checked as described in the Commission's Test Procedure for the Elimination of Rounding Error for Weighing Instruments with Digital Indication (Document 104), with, say, a load equal to 10e on the load receptor. The indication with 0,25e and 0,75e additional weight on the load receptor should then be 10e and 11e respectively.

2. Zero range — the maximum range of operation of the push-button zero device should not exceed 4% of the capacity of the instrument (± 2% approximately). Satisfactory setting may be checked by the following method:

   (a) with zero balance indicated, apply a load of, say, 0,144 kg to the instrument and press the "press to balance" button; the instrument should not rezero; and

   (b) reduce the load to, say, 0,096 kg and again press the "press to balance" button; the instrument should indicate zero balance.

3. Level sensitivity — as the automatic zero device may prevent the zero from changing when the instrument is tilted at zero load, the effect of tilt should be initially checked with a small load on the instrument, say, 10e.

   When the instrument is tilted so that the bubble in the level indicator moves 2 mm, the indication 10e should not change by more than 2e, and when the 10e load is removed and zero allowed to automatically reset, or is manually reset, in the tilted position, the instrument should satisfy the weighing-accuracy specification, that is, ± ½ scale interval for the first 500 scale intervals, ± 1 scale interval over 500 and up to 2 000 scale intervals, and ± 1½ scale intervals over 2 000.

4. Price-computing accuracy — the indications of weight, unit price and total price as listed in Table 1 will indicate that the price-computing and weight circuits are functioning correctly. The exact figures should be indicated as rounding is effected within the computer.

   Note: This test only establishes correct weight indications if the indicated weight is the same as the test weights. If this does not occur, a separate test, which may be carried out in conjunction with this test, in accordance with the Commission's recommended testing procedure for

the elimination of rounding errors - Document 104 - is necessary.

5. Range of indication —

(a) The maximum weight indicated should not exceed the maximum capacity (Max); above this indicated weight the indicator should be blank.

(b) The minimum weight indicated should be zero; below this indicated weight the indicator should be blank.

TABLE 1

Indicated weight	Unit price	Price
kg	$/kg	$
0	0	0
0,040	488,87	19,55
0,052	588,77	30,62
0,064	688,66	44,07
0,076	688,48	52,32
0,088	688,44	60,58
0,090	688,33	61,95
0,100	687,22	68,72
0,210	676,15	141,99
0,320	665,90	213,09
0,430	654,70	281,52
0,500	643,80	321,90
0,600	632,76	379,66
0,700	621,67	435,17
0,800	610,56	488,45
0,900	629,03	566,13
1,000	605,81	605,81
1,250	799,99	999,99
2,000	367,12	734,24
3,000	289,00	867,00
4,000	245,00	980,00
5,000	167,00	835,00
6,000	133,00	798,00
6,010	110,00	661,10

Test Procedure - 6,010-kg Instrument with Unit Price to $799,99 and Price to $999,99

TABLE 2

Indicated mass kg	Unit price $/kg	Price $
0,000	00,00	00,00
0,040	99,99	4,00
0,052	98,88	5,14
0,064	97,77	6,26
0,076	96,66	7,35
0,088	95,55	8,41
0,090	94,44	8,50
0,110	93,33	10,27
0,220	92,22	20,29
0,330	81,11	26,77
0,400	79,33	31,73
0,500	69,44	34,72
0,600	59,66	35,80
0,700	49,12	34,38
0,800	39,99	31,99
0,900	29,66	26,69
1,000	12,88	12,88
2,000	26,66	53,32
3,000	33,33	99,99
4,000	12,22	48,88
5,000	15,55	77,75
6,000	14,81	88,86
6,010	10,00	60,10

Test Procedure — 6,01 kg Instrument with Unit Price to $99,99/kg and Price to $99,99

TABLE 3

Indicated mass kg	Unit price $/kg	Price $
0,000	0,00	0,00
0,040	88,88	3,56
0,052	88,79	4,62
0,064	88,66	5,67
0,076	88,55	6,73
0,088	88,44	7,78
0,090	18,33	1,65
0,100	28,22	2,82
0,210	38,11	8,00
0,320	77,20	24,70
0,430	66,03	28,39
0,500	55,28	27,64
0,600	44,21	26,53
0,700	63,98	44,79
0,800	68,32	54,66
0,900	99,99	89,99
1,000	91,11	91,11
2,000	66,22	132,44
3,000	71,76	215,28
4,000	90,76	363,04
5,000	94,44	472,20
6,000	92,67	556,02
6,010	99,99	600,94

Test Procedure — 6,01 kg Instrument with Unit Price to $99,99/kg and Price to $600,94

TABLE 4

Indicated mass kg	Unit price $/kg	Price $
0,000	0,00	0,00
0,100	799,99	80,00
0,105	799,88	83,99
0,110	799,78	87,98
0,120	799,66	95,96
0,130	799,55	103,94
0,140	799,44	111,92
0,150	799,33	119,90
0,160	799,23	127,88
0,170	799,11	135,85
0,190	798,82	151,78
0,200	797,70	159,54
0,300	696,60	208,98
0,400	595,50	238,20
0,500	494,40	247,20
0,600	393,30	235,98
0,700	202,20	141,54
0,800	191,10	152,88
0,900	180,41	162,37
1,000	74,11	74,11
2,000	163,20	326,40
3,000	150,00	450,00
4,000	140,00	560,00
5,000	130,00	650,00
6,000	130,10	780,60
7,005	120,09	841,23
8,080	120,07	970,17
9,000	111,11	999,99
10,000	99,99	999,90
11,000	10,00	110,00
12,000	10,00	120,00
13,000	10,00	130,00
14,000	10,00	140,00
15,000	10,00	150,00
15,025	10,00	150,25

Test Procedure — 15,025 kg Instrument with Unit Price to $799,99/kg and Total Price to $999,99

TABLE 5

Indicated mass kg	Unit price $/kg	Price $
0,000	00,00	00,00
0,100	99,99	10,00
0,105	98,99	10,39
0,110	97,99	10,78
0,120	96,99	11,64
0,130	95,99	12,48
0,140	94,99	13,30
0,150	93,99	14,10
0,160	92,99	14,88
0,170	91,99	15,64
0,180	90,96	16,37
0,190	89,88	17,08
0,200	79,77	15,95
0,300	69,66	20,90
0,400	59,55	23,82
0,500	49,44	24,72
0,600	39,33	23,60
0,700	29,22	20,45
0,800	19,11	15,29
0,900	9,14	8,23
1,000	30,51	30,51
2,000	20,03	40,06
3,000	17,00	51,00
4,000	17,00	68,00
5,000	15,00	75,00
6,000	14,00	84,00
7,000	14,00	98,00
8,000	12,00	96,00
9,000	11,11	99,99
10,000	9,99	99,90
11,000	5,00	55,00
12,000	5,00	60,00
13,000	5,00	65,00
14,000	5,00	70,00
15,000	5,00	75,00
15,025	5,05	75,88

Test Procedure — 15,025 kg Instrument with Unit Price to $99,99/kg and Total Price to $99,99

TABLE 6

Indicated mass kg	Unit price $/kg	Price $
0,000	0,00	0,00
0,100	99,99	10,00
0,105	98,98	10,39
0,110	97,97	10,78
0,120	96,95	11,63
0,130	95,95	12,47
0,140	94,94	13,29
0,150	83,84	12,58
0,160	72,73	11,64
0,170	61,61	10,47
0,180	50,51	9,09
0,190	49,49	9,40
0,200	39,39	7,88
0,300	29,29	8,79
0,400	19,29	7,72
0,500	9,00	4,50
0,600	55,16	33,10
0,700	39,02	27,31
0,800	58,99	47,19
0,900	70,99	63,89
1,000	75,99	75,99
2,000	80,99	161,98
3,000	85,39	256,17
4,000	96,99	387,96
5,000	97,99	489,95
6,000	98,99	593,94
7,000	99,99	699,93
8,000	99,99	799,92
9,000	99,99	899,91
10,000	99,99	999,90
11,000	50,00	550,00
12,000	50,00	600,00
13,000	50,00	650,00
14,000	50,00	700,00
15.000	50,00	750,00
15,025	50,00	751,25

Test Procedure — 15,025 kg Instrument with Unit Price to $99,99/kg and Total Price to $999,99

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4D/84

VARIATION No 1

Pattern: Toledo Weighing Instrument Model 8403

Submittor: Toledo-Berkel Pty Ltd,
525 Graham Street,
Port Melbourne, Victoria, 3207.

Date of Approval of Variation: 15 January 1979

The modifications described in this Schedule apply to the patterns described in Technical Schedule No 6/4D/84 dated 12 September 1978.

All instruments conforming to this approval shall be marked "NSC No 6/4D/84".

Description:

The approved modifications provide for:

1. A capacity of 15,025 kg by 0,005 kg scale intervals with price computing in 1c increments to $799,99 per kg and price to $999,99. The price indicator will be blank for any combinations of mass and unit price for which the price exceeds $999,99. The unit price is entered sequentially by ten push-buttons and cancelled automatically when the weight indicated is below 0,055 kg or when the C button is pressed.

   The load receptor is supported by a Toledo Type 0721 22 kg sealed-construction cantilever load-cell resistant mechanism (see Figure 3).

   The instrument is marked adjacent to each weight indicator:

   (III)

Max	=	15,025 kg
Min	=	0,1 kg
$d_d = e$	=	0,005 kg

2. The instrument with price computing in 1c increments to $99,99 per

kg and price to $99,99. The price indicator will be blank for any combinations of mass and unit price for which the price exceeds $99,99.

3. The instrument with price computing in 1c increments to $99,99 per kg and price to $600,94 (6,01 kg capacity instrument) and $999,99 (15,025 kg capacity instrument). The price indicator will be blank for any combinations of mass and unit price for which the price exceeds $999,99.

4. The Toledo Type 0721 sealed-construction 11 kg cantilever load-cell resistant mechanism in the pattern replaced by a Toledo Type 0723 open-construction 11 kg cantilever load-cell resistant mechanism (see Figure 5).

5. A semi-automatic tare mechanism with a maximum value of 6,01 kg (6,01 kg capacity instrument) or 9,995 kg (15,025 kg capacity instrument). A container placed on the load receptor is automatically tared to within 0,25e when the tare button is pressed. A tare light adjacent to each weight indicator illuminates when any tare greater than 0,25e is selected (see Figure 6). On removal of the container the value of tare is indicated on the weight indicator prefixed by a minus sign. The tare will automatically cancel after a weighing or, if internally set, will require cancelling by the C button.

   The instrument is marked adjacent to the weight indicator:

(III)			or	(III)		
Max	=	6,01 kg		Max	=	15,025 kg
Min	=	0,04 kg		Min	=	0,1 kg
d_d = e	=	0,002 kg		d_d = e	=	0,005 kg
T	=	- 6,01 kg		T	=	- 9,995 kg

   and NOT FOR RETAIL COUNTER USE.

6. A prepack weighing instrument comprising a Toledo 8403 weighing unit with semi-automatic tare and a Toledo 300 self-adhesive-label printer (see Figure 7). The printer is inhibited to prevent printing when the load is less than 20e. A sample ticket is illustrated in Figure 8.

   In addition to the semi-automatic tare mechanism a preselected subtractive tare mechanism with a maximum effect of 6,01 kg (6,01 kg capacity instrument) or 9,995 kg (15,025 kg capacity instrument) may be fitted to the prepack weighing instrument. Tare may be selected in 0,005 kg increments by pressing the

appropriate numeral buttons on the keyboard and then the T button.

The data cable providing the mass, unit-price and price information to the label printer is internally connected within the weighing unit and within the label printer. A cover within the label printer prevents access to the printer circuit boards and the data cable connections; it is sealed by lead-and-wire seals (see Figure 9).

7. A Toledo 8403 weighing instrument of 6,01 kg or 15,025 kg capacity with a Toledo 300 ticket printer (see Figure 7). The tickets may be hand-held or adhesive and are intended for printing in the presence of the purchaser. The ticket is similar to the sample label illustrated in Figure 8.

   The instrument does not have a tare device and is approved for retail counter use.

   The maximum unit price and the maximum price displayed or printed are both $99,99, with the printer connected.

   The ticket printer and data cable are sealed as described above.

Special Tests:

The special tests described in Technical Schedule No 6/4D/84 dated 12 September 1978 apply to this variation. The following additional tests also apply:

1. Price-computing accuracy — the indications and, as appropriate, the printings of mass, unit price and price as listed in Tables 1 to 6 will indicate that the price-computing and weight circuits are functioning correctly. The exact figures should be indicated as rounding is effected within the computer.

   Note: This test does not establish correct mass indications; a separate test, which may be carried out in conjunction with this test, in accordance with the Commission's recommended testing procedure for the elimination of rounding errors — Document 104 — is necessary.

2. Taring — at any load within the capacity of the tare mechanism, the tare mechanism in conjunction with the automatic zero device should be able to reset the weight indicator to zero within 0,25e. This may be checked as described for "zero test".

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4D/84

VARIATION No 2

Pattern: Toledo Weighing Instrument Model 8403

Submittor: Toledo-Berkel Pty Ltd,
525 Graham Street,
Port Melbourne, Victoria, 3207.

Date of Approval of Variation: 9 March 1979

The modification described in this Schedule applies to the patterns described in Technical Schedule No 6/4D/84 dated 12 September 1978, and Technical Schedule No 6/4D/84 - Variation No 1 dated 6 February 1979.

All instruments conforming to this approval shall be marked "NSC No 6/4D/84".

Description:

The approved modification provides for the resistant mechanism of the 15,025 kg capacity instrument with the Toledo Type 0721 sealed-construction 22 kg cantilever load cell replaced with a Toledo Type 0723 open-construction 22 kg cantilever load cell. The load cell is similar in appearance to the 11 kg load cell illustrated in Figure 5.

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4D/84

VARIATION No 3

Pattern: Toledo Weighing Instrument Model 8403

Submittor: Toledo-Berkel Pty Ltd,
525 Graham Street,
Port Melbourne, Victoria, 3207.

Date of Approval of Variation: 22 March 1979

The modification described in this Schedule applies to the patterns described in Technical Schedule No 6/4D/84 dated 12 September 1978 and Technical Schedule No 6/4D/84 - Variation Nos 1 and 2 dated 6 February 1979 and 9 March 1979 respectively.

All instruments conforming to this approval shall be marked "NSC No 6/4D/84".

Description:

The approved modification provides for the ticket printer printing price only when used with a Toledo 8403 retail counter weighing instrument.

The ticket may have the word "dollars" printed above or below the price, or the symbol "$" printed before the price. The word "dollars" or the symbol "$" may be either preprinted on the ticket or printed by the printer.

19/4/79

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4D/84

VARIATION No 4

Pattern: Toledo Weighing Instrument Model 8403

Submittor: Toledo-Berkel Pty Ltd,
525 Graham Street,
Port Melbourne, Victoria, 4307.

Date of Approval: 6/8/79

Description of Variant:

1. The prepackaging weighing instrument described in Technical Schedule No 6/4D/84 - Variation No 1 (Variant 6) with a Toledo 3000 label printer (Figure 10) replacing the Toledo 300 printer. The printer is inhibited from printing when the load is less than 20e. A sample label is illustrated in Figure 11.

   The cable providing data to the printer is internally connected within the weighing instrument and sealed to the printer as illustrated in Figure 12, or alternatively the serial number of the printer is sealed to the weighing unit. A Weights and Measures Authority may authorise either method of sealing.

   The ticket printer is also sealed to prevent access to components the removal or replacement of which could affect the performance of the instrument (Figure 12).

2. The retail ticket-printing counter machine described in Technical Schedule No 6/4D/84 - Variation No 1(Variant 7) with Toledo 3000 ticket printer replacing the Toledo 300 printer. The ticket is similar to the sample label illustrated in Figure 11, or alternatively the printer may print price only, in which case the word DOLLARS may be printed above or below the price, or the symbol $ may be printed before the price. The word DOLLARS or the symbol $ may be either preprinted on the ticket or printed by the printer. The printer is inhibited from printing when the load is less than 20e.

   The ticket printer and data cable are sealed as described above.

Test Procedure:

As described in Technical Schedule No 6/4D/84 and its Variations.

Accuracy Requirements:

The maximum permissible errors are:

± 0,5e for loads between 0 and 500e;
± 1e for loads between 501e and 2000e; and
± 1,5e for loads above 2000e.

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE NO 6/4D/84

VARIATION NO 5

Pattern: Toledo Weighing Instrument Model 8403

Submittor: Toledo-Berkel Pty. Ltd.,
525 Graham Street,
Port Melbourne, Victoria, 3207

Description of Variant:

1. An instrument of capacity 9,995 kg by 0,005 kg without price computing or tare facilities and with indication of mass in a separate housing, known as Model 8211 (Figure 13). The indicator may be attached to the weighing unit, or separated from it, in which case it is installed so that there is a self-evident association between it and the weighing unit. The interconnecting cable is internally connected within the weighing unit and within the mass indicator.

   Sealing

   (a) Indicator

   A lead-and-wire seal prevents the cover of the indicator from being removed (Figure 14).

   (b) Weighing Unit

   The stamping plug retains the cover on the instrument (Figure 13).

   The nameplate is marked with the following data:

Manufacturer's name	
Serial number of instrument	
NSC approval number in the form:	NSC No 6/4D/84
Accuracy class in the form:	III
Maximum capacity in the form:	Max .....*
Minimum capacity in the form:	Min .....*
Verification scale interval in the form:	d = e = ...*

* These markings are repeated on the indicator

An output socket which is mounted inside the cabinet may be used to provide information to peripheral devices which are not a part of the measuring instrument. These devices, which may only be provided with the authorisation of the Weights and Measures Authority of the State, may, for example, print receipts or store and process the data, etc. This output information is inhibited until the signal sampled in successive counting periods is the same, that is, the instrument is in equlibrium.

The use of such peripheral equipment will not affect the operation of the weighing instrument.

2. An instrument as described in variant 1 above, of capacity 15,025 kg by 0,005 kg.

Test Procedure:

As described in Technical Schedule No 6/4D/84, with the omission of Test No 4, price-computing accuracy, and the addition of the test for accuracy described below:

Accuracy Requirements:

The application of the test loads specified in Table 1 and the display of these loads within the accuracy requirements listed below will check that the instrument operates in accordance with the approved design.

The maximum permissible errors are:

± 0,5e for loads between zero and 500e inclusive;
± 1e for loads between 501e and 2000e inclusive; and
± 1,5e for loads greater than 2000e.

** The measuring instrument examined and approved by the Commission is limited to the devices which determine the value of a physical quantity, control the measurement, and indicate the result of the measurement on a visual display, for example, a seven-segment indicator.

TABLE 1

Test load in scale intervals *

20				
25	60	120	250	698,5
30	70	140	300	798,5
35	80	160	350	898,5
40	90	180	400	998,5
45	100	200	450	1198,5
50			500	1398,5
				1598,5
				1798,5
				1998,5
				2498
				2997

* Test load = Number of scale intervals x scale interval.

Note: The test load should include a test at maximum capacity less the tolerance and less 0,5 scale interval.

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4D/84

VARIATION No 6

Pattern: Toledo Model 8403 Weighing Instrument

Submittor: Toledo Scale (Australia) Pty Ltd,
525 Graham Street,
Port Melbourne, Victoria, 3207.

1. Description of Variant

Toledo model 8211 weighing instrument connected to any cash register, subject to the Conditions of Approval stated in Certificate of Approval No 6/4D/84.

The model 8211 has a capacity of 9.995 kg or 15.025 kg by 0.005 kg, scale intervals, without price computing and with a separate indicator.

19/4/82

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4D/84

VARIATION No 7

Pattern: Toledo Model 8403 Weighing Instrument

Submittor: Toledo Scale (Australia) Ltd
525 Graham Street
PORT MELBOURNE, VICTORIA, 3207.

1. Description of Variant 19

With an alternative remote indicator (Figure 15) with the VERIFY function transferred to the weighing unit. The indicator has been altered to replace the original display with seven-segment bar indicators.

CRC

NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/4D/84

CHANGE No 1

The description of the

Toledo Weighing Instrument Model 8403

given in Technical Schedule No 6/4D/84 - Variation No 1, issued on 6/2/79, is altered by changing the unit price in the 8th line of Table 4 from $709,33 to $799,33.

19/11/79

NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/4D/84

CHANGE No 2

The following change is made to Certificate of Approval No 6/4D/84 dated 19/5/83 for the Toledo Model 8403 Weighing Instrument.

Change the expiry date from 1/9/83 to 1/3/84 (to allow existing machines not yet sold to be put into service).

Signed

Executive Director

24/10/83

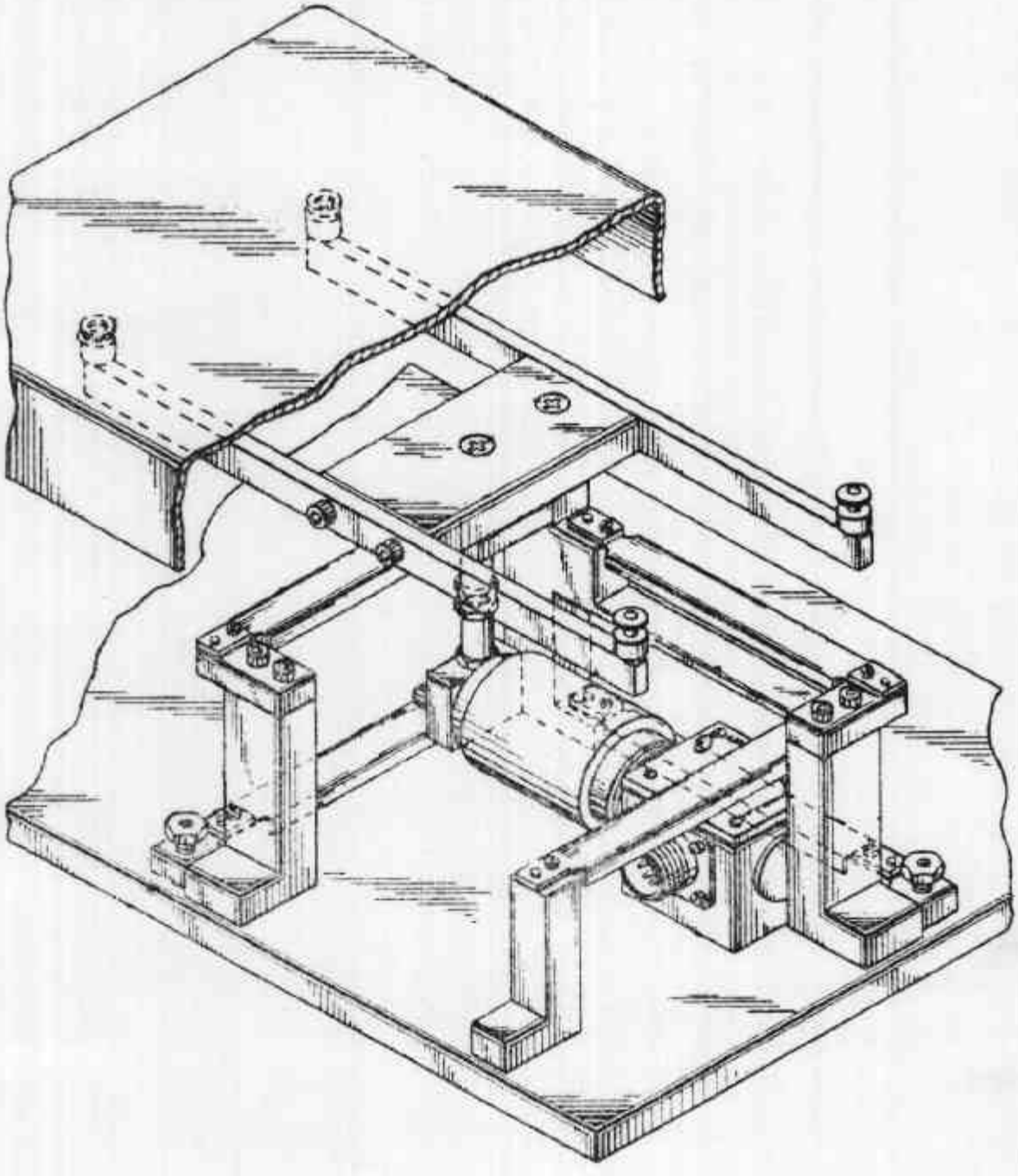
FIGURE 6/4D/84 - 1

Toledo 8403 – Vendor's Side

12/9/78

Toledo 8403 – Purchaser's Side

FIGURE 6/4D/84 - 3



Toledo 8403 – Schematic Drawing

12/9/78

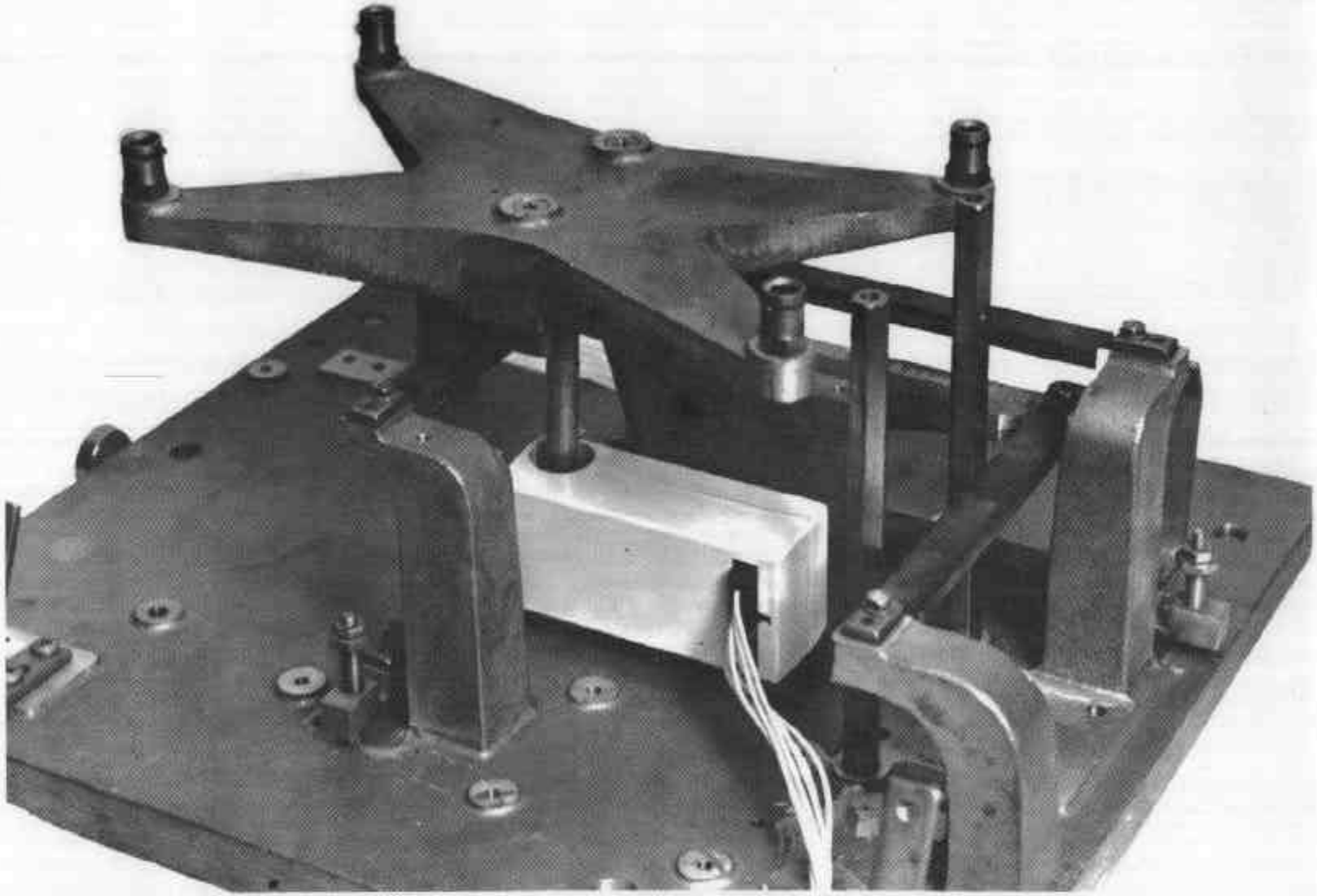
FIGURE 6/4D/84 - 4

Toledo 8403 with Remote Keyboard

12/9/78

FIGURE 6/4D/84 - 5

6/2/79



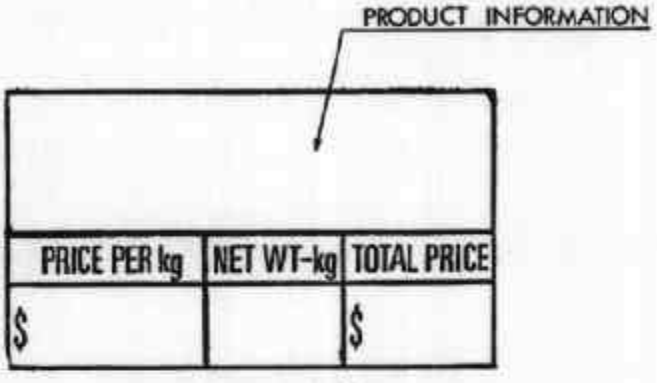
Toledo Type 0723 Open-construction Cantilever Load-cell Resistant Mechanism

FIGURE 6/4D/84 - 6

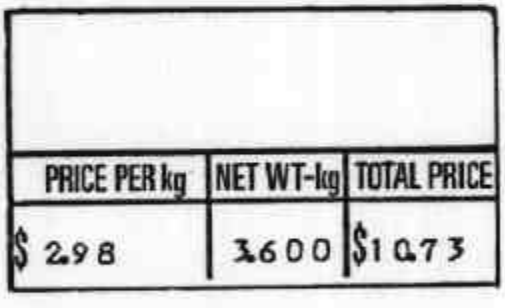
Toledo 8403 with Semi-automatic Tare

FIGURE 6/4D/84 - 7

Toledo 300 Label Printer



(a) Before printing

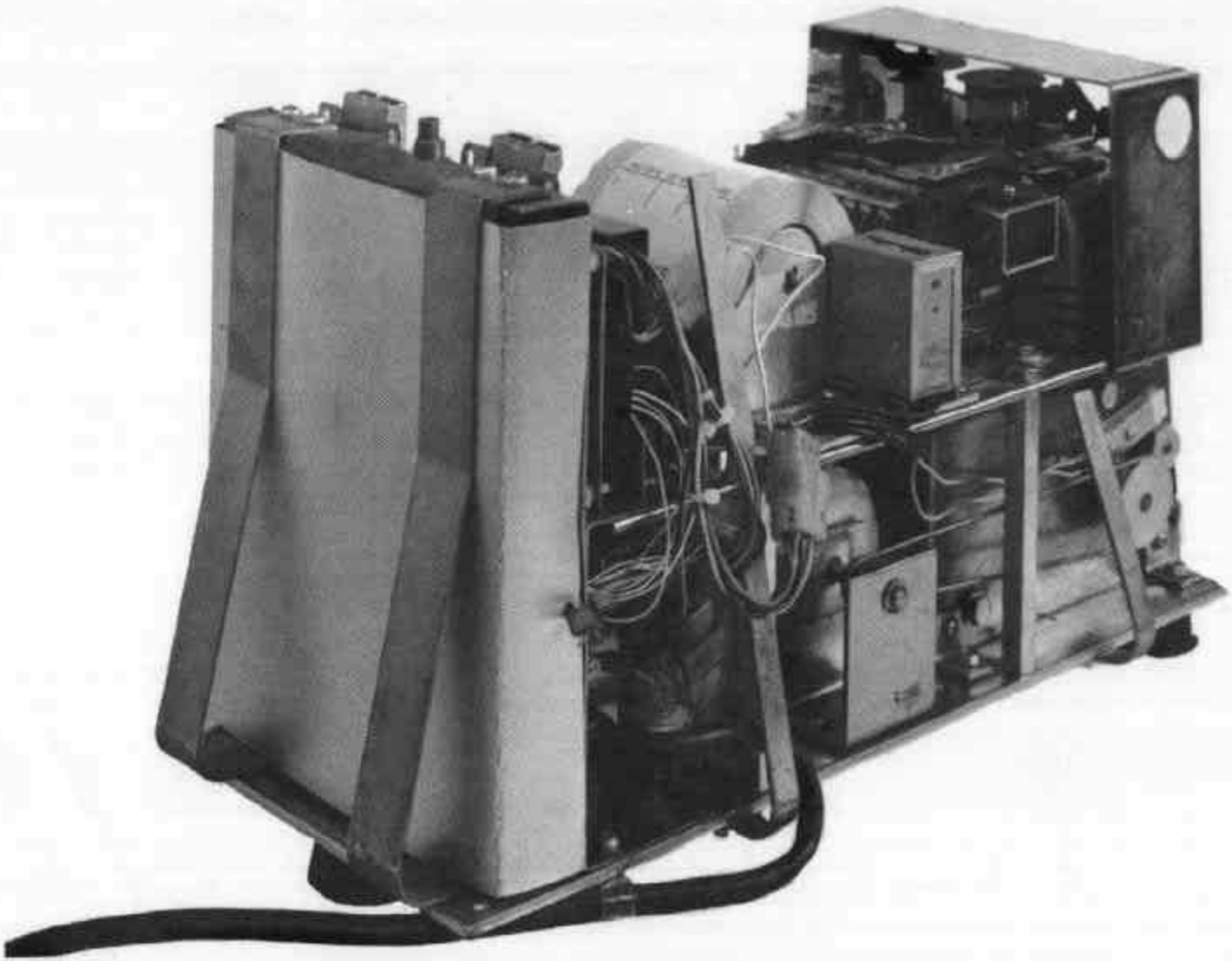


(b) After printing

Sample Label (actual size)

FIGURE 6/4D/84 - 9

6/2/79



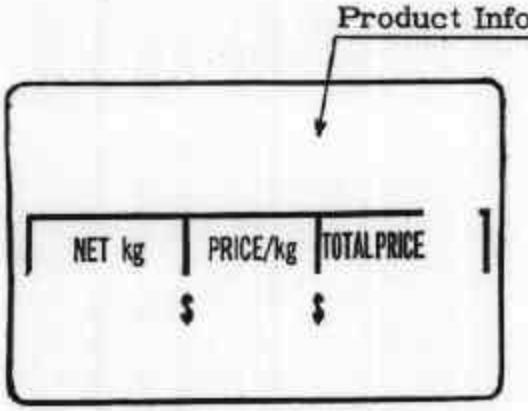
Toledo 300 Label Printer — Sealing of Printer Circuit Board

FIGURE 6/4D/84 - 10

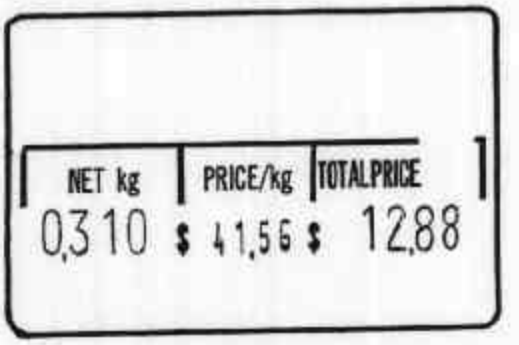
Toledo 3000 Ticket Printer

28/8/79

FIGURE 6/4D/84 - 11



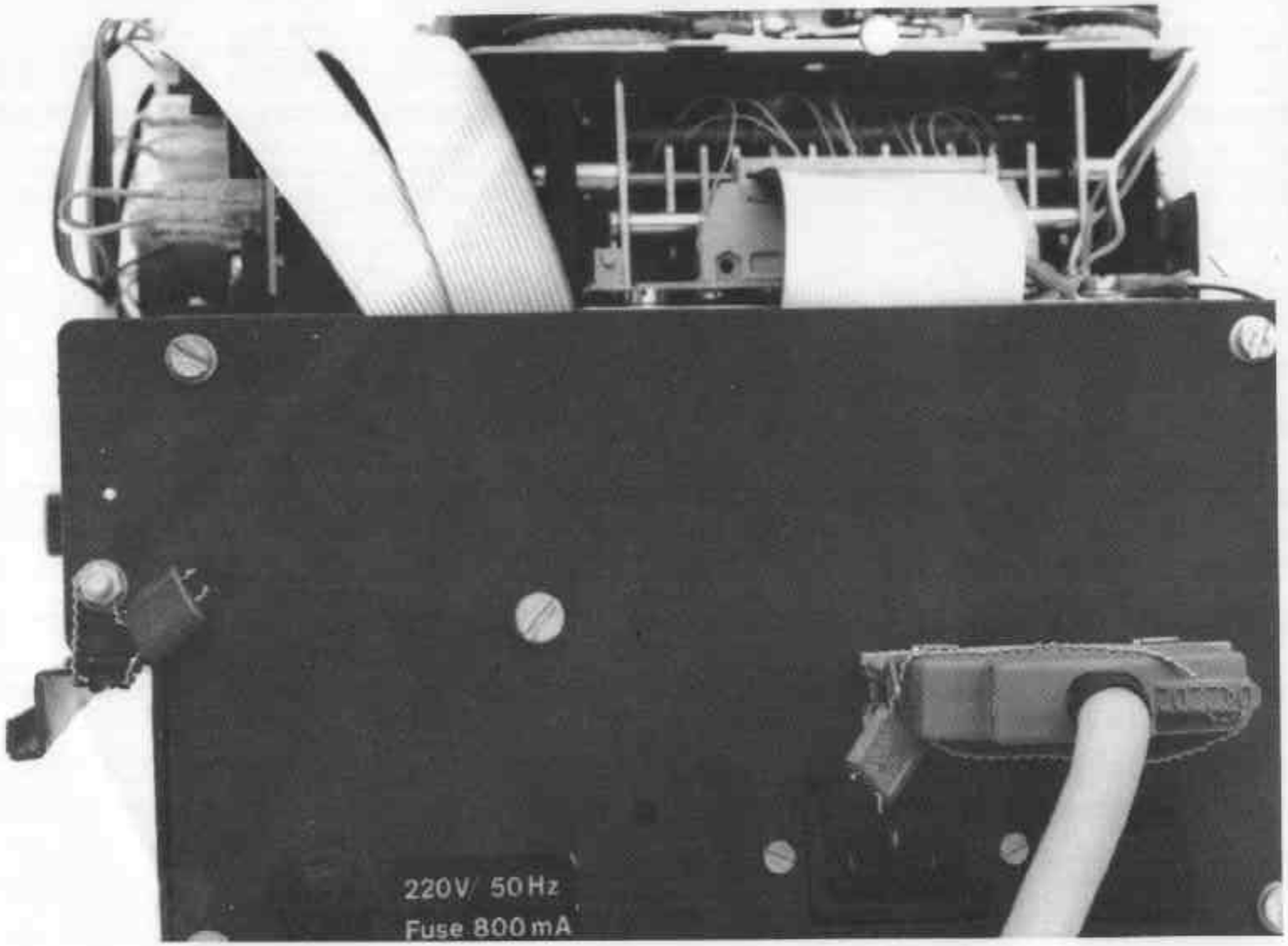
(a) Before printing



(b) After printing

Toledo 3000 Ticket Printer — Sample Label (actual size)

28/8/79

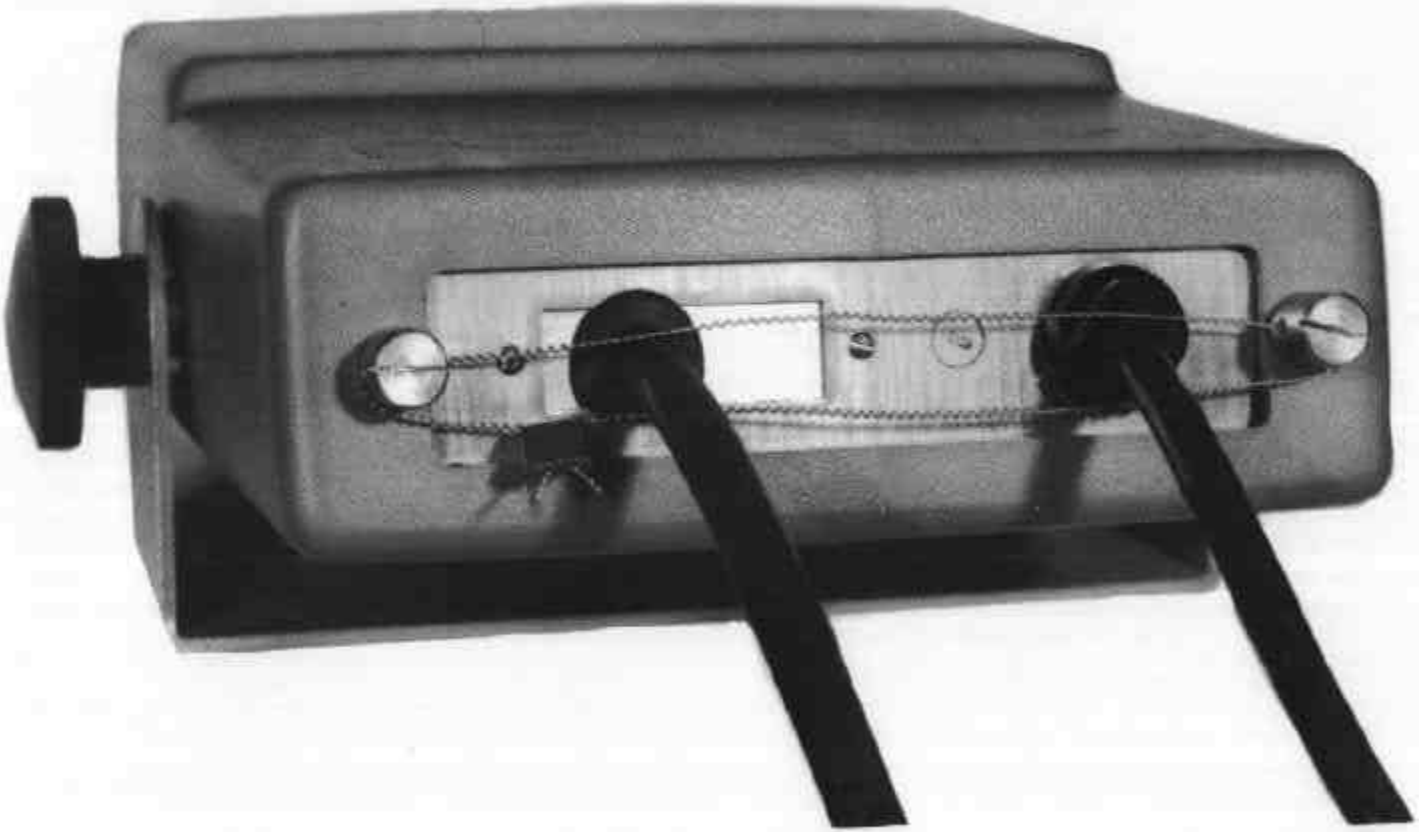


Toledo 3000 Printer — Rear View showing Sealing of Cable and Printer

Figure 6/4D/84-13

Toledo Model 8211

Figure 6/4D/84 - 14



Toledo 8211 - Rear View of Indicator

FIGURE 6/40/84 - 15

With Alternative Remote Indicator