Avery Berkel

SERVICE INSTRUCTIONS

B806

Compact Weigh Price Labeller

76102–865

Issue1/03.10.99

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These Service Instructions have been prepared to assist in after sales service by providing information on the installation, maintenance and repair of the equipment.

It is suggested that you study these Service Instructions carefully and familiarise yourself with them, particularly the sections listing major components, test points and adjustment available. The Service Instructions can then be used as a reference book by referring to the detailed contents page to obtain the information required.

The Parts List should also be studied and it is recommended that parts are ordered in advance for stock purposes in order to accommodate future service requirements.

These Service Instructions are not a replacement for training but should be used to supplement training courses, which take place at our Service Training Centre or, alternatively, within the Service Regions and Overseas Territories.

Amendments will be issued as necessary. To ensure that your Service Instructions are up to date the Amendment Record Sheet must be completed as the amendments are made to the Instructions.

For further information on Service or Parts, please contact your nearest Avery Berkel dealer or contact Avery Berkel Technical Support:

Avery Berkel Technical Support
West Bromwich Road
Tame Bridge
Walsall
West Midlands
WS5 4BD

Tel: 01922 434343
Fax: 01922 616806
Telex: 338186

Ordering

New Parts

When ordering a new part, make sure that you use the correct part number. Before fitting, make sure that its part number matches the part number of the part being removed (or is an approved alternative).

NOTE:

This manual remains the property of GEC Avery Limited and must be returned to the Company on request or if you should leave the Company's employment.

Amendment	Date	Amendment Details
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%	Per cent
°C	Degrees Celsius
A	Ampere
A/D	Analogue to digital
ASIC	Application specific integrated circuit
AVR	Automatic variable resolution
Comms	Communications
DIL	Dual–in–line (switch)
DMM	Digital multimeter
DPE	Data processing engine (comms controller PCB)
DVM	Digital voltmeter
EEPROM	Electronically, erasible, programmable, read–only memory
EPROM	Erasible, programmable, read–only memory
FIP	Fluorescent indicator panel
FS#	Circuit code: fuse number #
g	Gram
Hz	Hertz
I/O	In/out
IC#	Circuit code: integrated circuit number #
in	Inch
kg	Kilogram
lb	Pound (Imperial weight)
LCD	Liquid crystal display
LED	Light emitting diode
LK#	Circuit code: link number #
LSB	Least significant bit
LSD	Least significant digit
max.	Maximum
min.	Minimum
mm	Millimetre
MSB	Most significant bit
MSD	Most significant digit
N/A	Not applicable
oz	Ounce
PC	Personal computer
PCB	Printed circuit board
PL#	Circuit code: plug number # (electrical connector)
PLU	Product look up
PSU	Power supply unit
RAM	Random access memory
RV#	Circuit code: variable resistance number #
SK#	Circuit code: socket number #
SMPS	Switched–mode power supply
SSD	Static sensitive device (for example, a PCB)
SW#	Circuit code: switch number #
TP#	Circuit code: testing point number #
V	Volt
V#	Circuit code: power transistor number #
VA	Volt–Ampere
Vac	Voltage, alternating current
Vdc	Voltage, direct current
W	Watt

Section 1
Introduction

Table of Contents:

1.1 Mechanical description

1.1.1 General

The B806 System consists of a main support frame with In–feed, Weighing and Labelling conveyors, a printer applicator and an operations indicator.

The B806 System is mainly constructed in Stainless Steel, so that it complies with hygiene regulations for all food contact points. The 3 conveyor belts are controlled by light barrier sensors, and can be operated in 3 different ways:

Automatic (the default mode) – a pack is placed, either manually or automatically, on the in–feed conveyor and is then transferred to the weighing conveyor, where it is weighed and then on to the labelling conveyor, where the label is attached.

Manual – this is invoked by pressing F5 – all conveyors are immobilised and a pack is placed directly onto the weighing conveyor. The label is printed and is placed manually on the pack.

Transport – this is invoked by pressing F6 – the weighing and labelling functions are disabled, but the conveyors operate allowing packs to pass though the System without stopping.

The B806 System can be ordered to transport packs from either left to right or right to left. The conveyor speed can be selected to one of three speed settings and the acceleration/deceleration rate can also be modified to suit pack handling and control.

The B806 adapts automatically for varying height packs (up to 200 mm) and the correct label applicator force for packs is contained within the PLU.

Ten different labelling programmes are supplied with the standard System.

1.1.2 Performance

Speed:	Up to 60 packs per minute (dependent on pack and label dimensions)
Scale capacity:	8 kg AVR
Division size:	1/2/5 g
Minimum weight:	20 g
Maximum tare weight:	2 kg
Maximum pack size:	250 mm L x 280 mm W x 200 mm H

(Longer packs – up to 500 mm – can be accommodated by repositioning the conveyors)

1.1.3 Printing (thermal direct)

The Printer/Applicator can be rotated through 180° in 45° steps.

Print width:	78 mm
Label:	37 mm minimum/88 mm maximum W 37 mm minimum/100 mm maximum L

Up to 100 fields can be printed on each label. Each print can be rotated through 0°, 90°. 180° and 270°. Bar codes, in EAN13, ITF 2 of 5 and Code 39 formats, can be printed at 0° and 180°.

Label roll diameter: 240 mm

1.2 Electrical description

1.2.1 Supply

230 V ac, 3 amps, 50/60 Hz (± 8% tolerance)

1.2.2 Photo cells

This is a reflective system, embedded between the conveyor belts.

The sensitivity is adjustable to suit ambient length conditions and pack parameters.

1.2.3 Display

The indicator can exhibit messages or prompts to assist or control, the operator. These messages are freely programmable and can be used any number of times in different PLUs. Passwords can also be created to protect/prevent unauthorised access.

1.3 Options

The B806 System can be supplied with the following options:

Additional In–feed Conveyor – this ensures that packs are separated before they are presented for weighing/labelling.

Data Back–up – data can be saved to either a 3.5 Floppy Disk or to a host computer via MX100. The B806 can, as an alternative, be linked to Avery Berkel's CX/Advantage range via a PC.

Image Scanning – a hand held image scanner can be used to copy images into the B806, for printing onto labels.

Graphics Editor – this provides the means to either reduce or enlarge images.

Reject Mechanism – this mechanism can be programmed to reject any pack which has not be labelled.

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Section 2
Safety

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2.1 Introduction

Only fully trained service personnel are permitted to install, adjust, service or dismantle this equipment.

This equipment is powered by a mains voltage which presents an electric shock hazard. Before removing the machine cover/s, ensure that it is completely disconnected from the supply.

Whilst the machine presents no mechanical or electrical hazards to the operator or service engineer during normal usage, before any servicing or maintenance is carried out the machine must be isolated from the mains supply.

When the occasion does arise that the mains power must be applied during servicing of the machine, remember that lethal voltages are present. Also the need to wear eye protection to protect against exploding capacitors is essential.

2.2 General

Please read the following instructions before installation of the machine. This is for your own safety and for proper working.

DO NOT STAND, SIT OR WALK ON THE MACHINE!

2.3 Warnings and cautions

2.3.1 Installation

When lifting, moving or supporting the machine, ensure that all equipment is rated to handle the loads involved.

When handling Printed Circuit Boards, ensure that full anti–static precautions are observed.

The machine must be correctly connected to the protective earth conductor of the mains voltage supply through the mains lead. The installation must comply with any relevant national wiring regulations.

Caution:

Pluggable equipment must be installed near an easily accessible socket outlet. Permanently connected equipment must have a readily accessible disconnect device incorporated in the fixed wiring.

When a plug and socket is used it must be such that the earth contact is made *before* the power conductors, and broken *after* the power conductors.

For your protection all mains (110V or 230V) equipment used out of doors or in wet or damp conditions should be supplied from a correctly fused source and protected by an approved RCD to BS7071 or BS7288 or BS4293. IF IN DOUBT SEEK ADVICE FROM A QUALIFIED ELECTRICIAN.

2.3.2 Safe use

Caution:

The B806 System weighs 150 kg. The feet of the machine must be secured to the floor using the screws and Rawlplugs provided, to prevent the machine from being accidentally over–turned.

WARNING:

This equipment is from a mains voltage which presents an electric shock hazard. Before removing the unit case or the covers of any remote units (for example, weighing platforms, printers etc.) isolate the machine from the mains power supply and ensure that it cannot be connected inadvertently by other persons.

When the covers are removed, do not apply power to the unit unless specifically instructed to do so in this handbook.

When working on live equipment, exercise great care, use insulated tools and test equipment, and do not work alone.

When testing or fault finding, exercise extreme care. Ensure that any test equipment used is in good condition and capable of withstanding the existing voltages. All tools used must have insulated handgrips. Test probes and jumper leads must be in good condition with adequate insulation. Test probes with claw ends and jumper leads must not have insecure parts that may fall during use.

Caution:

The power supply plug must be inserted in a socket outlet provided with a protective earth contact. The electrical supply at the socket outlet must provide over–current protection of 5A. The socket outlet must be within easy reach for isolation of the machine for cleaning and servicing.

The correct mains voltage supply must be determined from the rating plate and the correct setting made before the machine is connected to the mains voltage supply.

The machine must be independently isolated from the mains voltage supply before any attempt is made to change or check the protective fuse. The fuse cover must always be replaced before the machine is re–connected to the mains voltage supply.

After switching off the machine wait for 20 seconds before restoring the power. If you switch on within this period the internal power supply fuse may be over–loaded and fail.

Scale

The range of the scale is 8 kg. Loads of greater than 8 kg may damage the Scale.

Labelling system

Ensure that the Applicator foot of the labelling system is not resting on the conveyor when the machine is switched on. The applicator system may be damaged if the applicator is not returned to its raised position before switching on.

Transportation system – roller system

The outfeed gravity roller system at the end of the machine may be fitted if the B806 is not interfaced to a conveyor supplied by a third party.

The square section rod fitted to the roller system, for catching labels, can be pulled out by 30 mm for cleaning. Before pulling this rod out switch of the machine or select manual mode, to prevent the conveyors starting. Return this rod to its original position after cleaning.

Thermo printer

After a period of continuous working the temperature of the print head may reach 60^{o}. Allow a cooling period before touching the print head.

Caution:

Print head is very hot.

Switch the printer off when changing the print head.

The device could be damaged by electro static discharge. Do not touch the thermo print head or the connectors or the printer PCB unless you are connected to the machine's earth using an anti–static strap.

When replacing the print head please ensure that the print head connector pins are aligned with the correct apertures in the male receptacle.

Caution:

Never close the printer without a platen felt protecting the print head.

Never print without felt.

Electronic

Almost all electronic integrated circuits, commonly known as 'chips', are static sensitive devices (SSDs). They will be destroyed if contaminated with static electricity.

When servicing any machine and handling PCBs make sure that you observe full anti–static precautions.

2.4 Cleaning

Caution:

Isolate the machine from the mains before cleaning.

When cleaning the machine ensure that the print head is protected from the ingress of moisture. Serious damage will occur if water is allowed to come into contact with the print head.

Do not clean the machine whilst it is switched on. When cleaning, use only a clean cloth moistened with water containing a small amount of domestic detergent.

Where applicable, when cleaning the print head, use print head cleaning kit part number 76801–102 and follow the instructions supplied with it. Do not use metallic objects on the print head.

Section 3
Specifications

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3.1 Dimensions

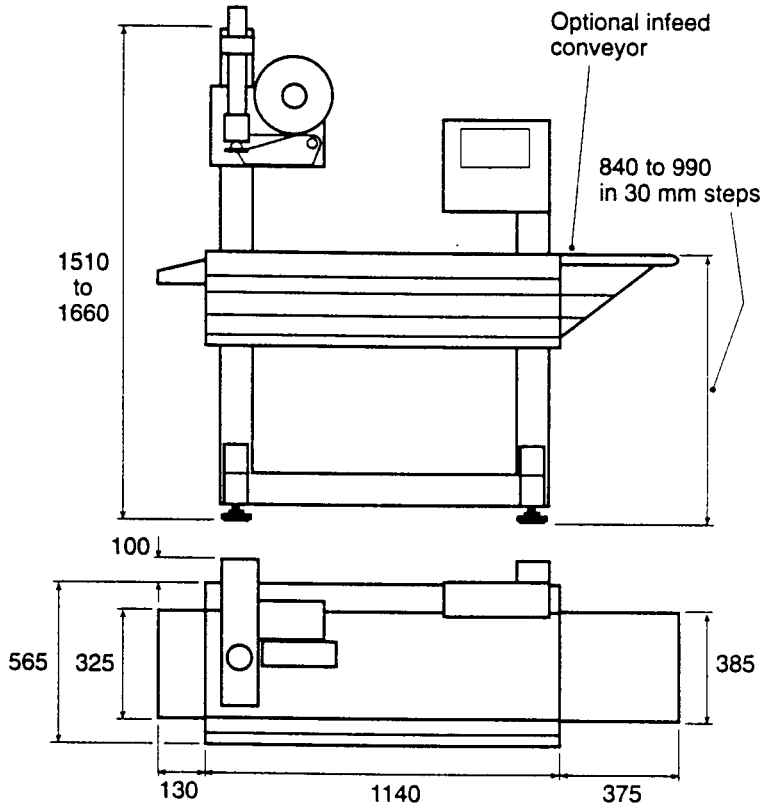

Figure 3.1 Dimensions of B806

3.2 Electrical supply

230 V ac, 3 amps, 50/60 Hz (± 8% tolerance)

3.3 Temperature range

The B806 has a working temperature range of –10°C to +40°C.

3.4 Noise level

The noise level emitted by the B806 during production is 75 dB @ 1 m at a height of 1.6 m.

3.5 Interface information

The B806 can provide Data Back–up via 3.5 in Floppy Disk, or MX100 to a host computer. Data saved onto 3.5 in Floppy disk can then be transferred to another B806, thus saving having to re–enter product data manually, and system data can be easily reloaded.

It also enables customer data to be held centrally in the Avery Berkel Service Centres, where data can be E–mailed back to customers when requested. The same facility can be used to provide updates and changes.

The MX100 programme provides the method of communication between the B806 and any data management and report creating application. The MX100 is also an integrated element of the MX400 Avery Berkel Total Scale Control application.

The PLU number and associated weight information can be transmitted to a PC running the Q4 production statistics application, which enables creation of graphs and tables to assist production planning.

3.6 B806 display

The display is a microprocessor controlled, multi–functional system with a liquid crystal display (LCD). The indicator has an integral QWERTY keyboard with function and numeric keys.

Figure 3.2 Indicator display

3.7 Pneumatic system

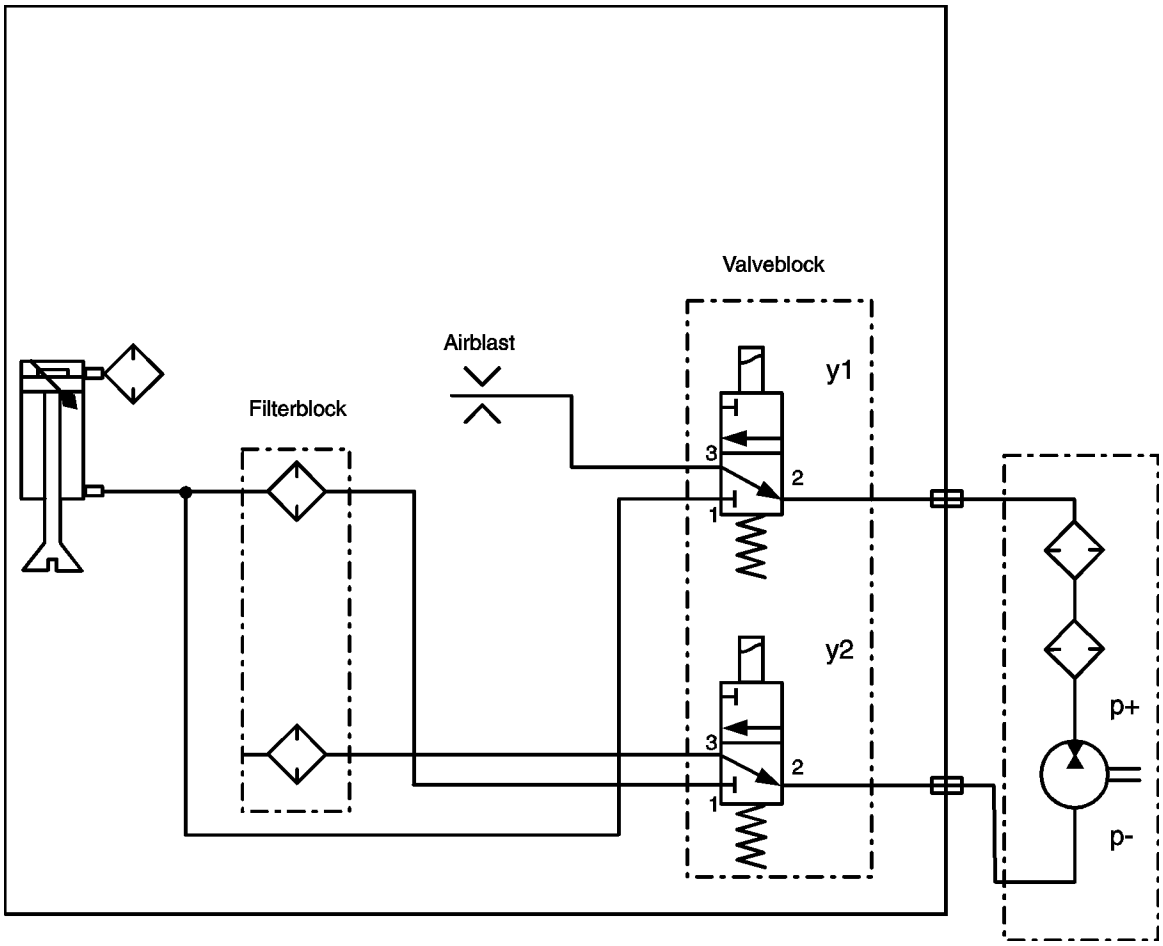

Figure 3.3 Pneumatic circuit

3.8 Circuit diagrams

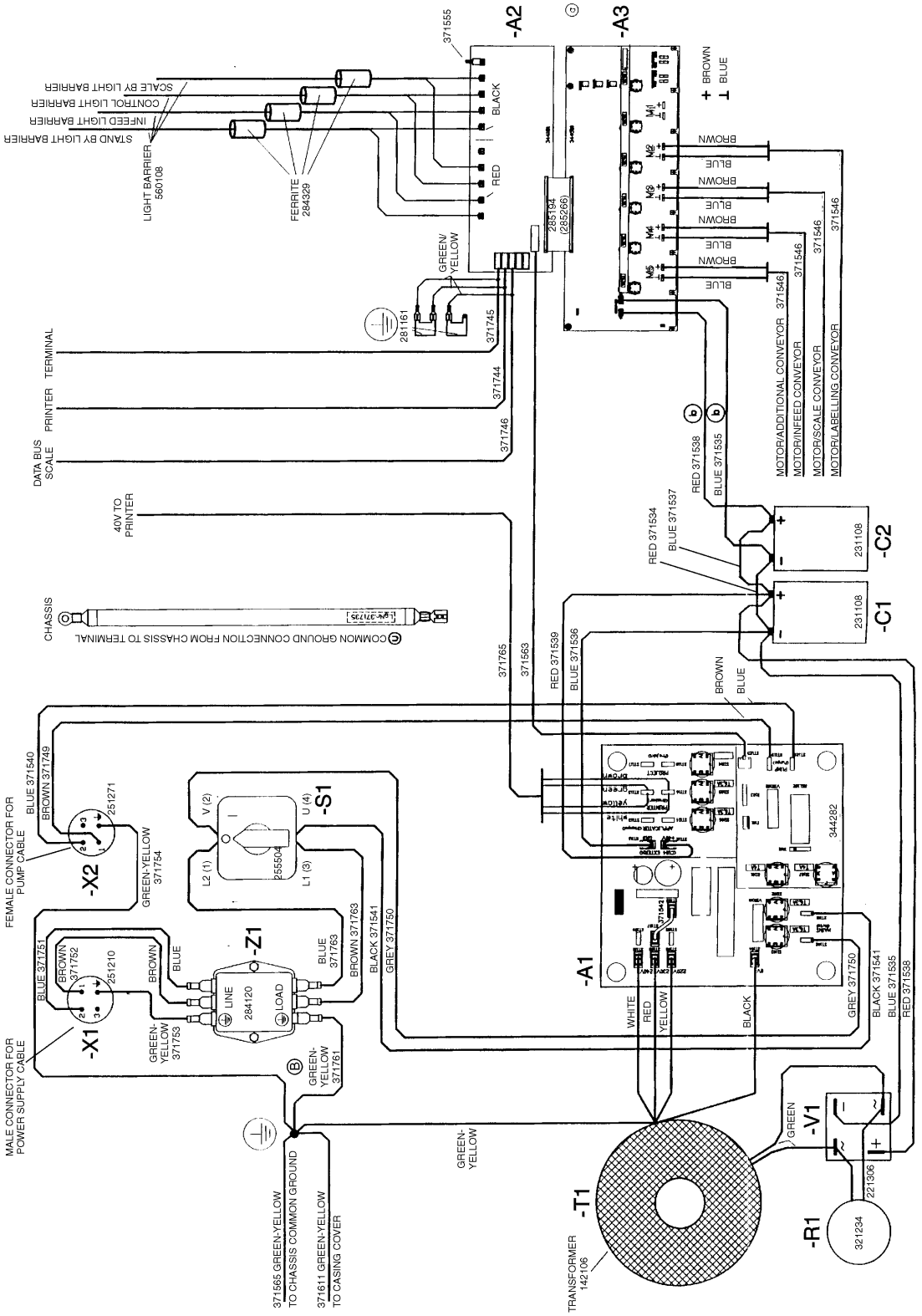

Figure 3.4 Power and main case

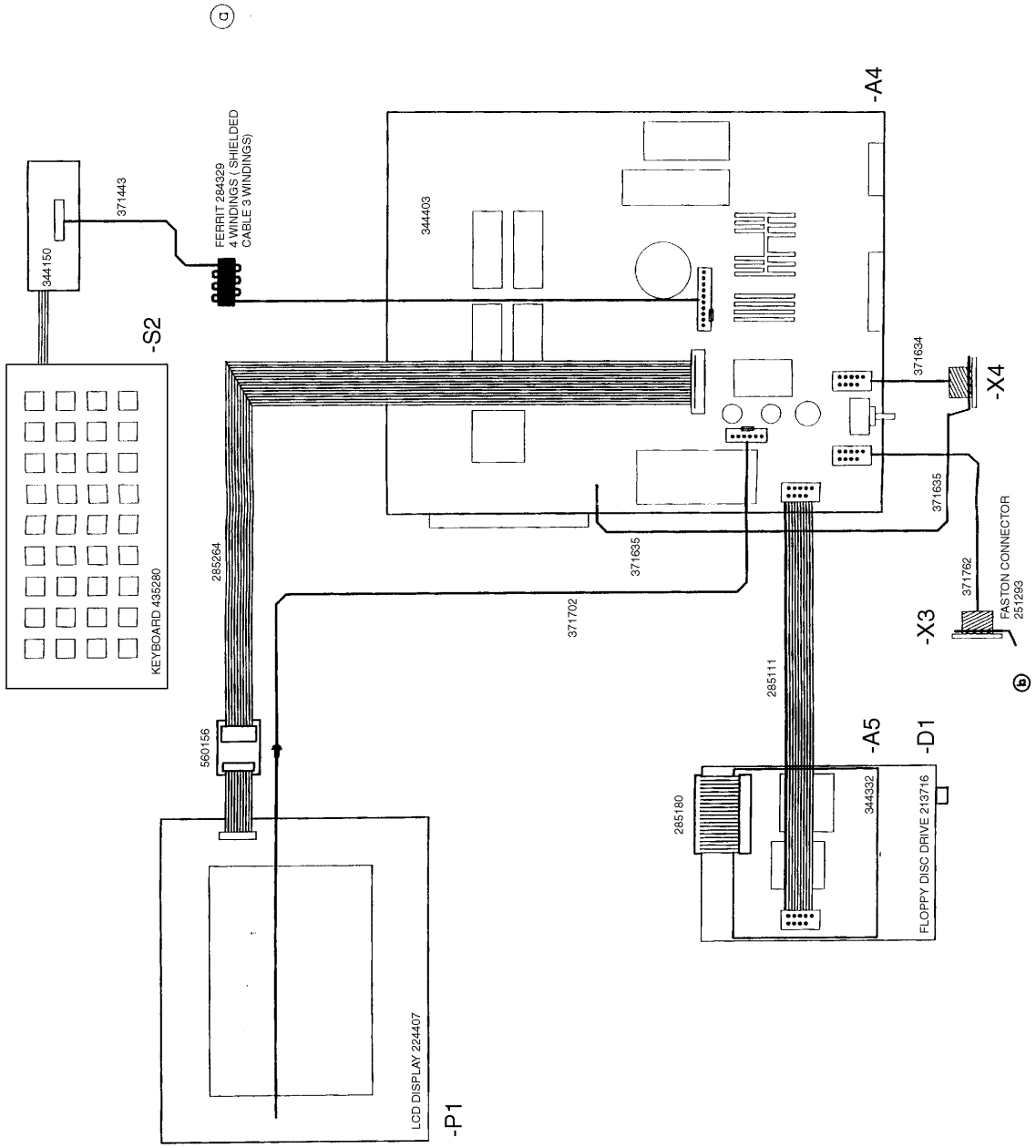

Figure 3.5 Terminal

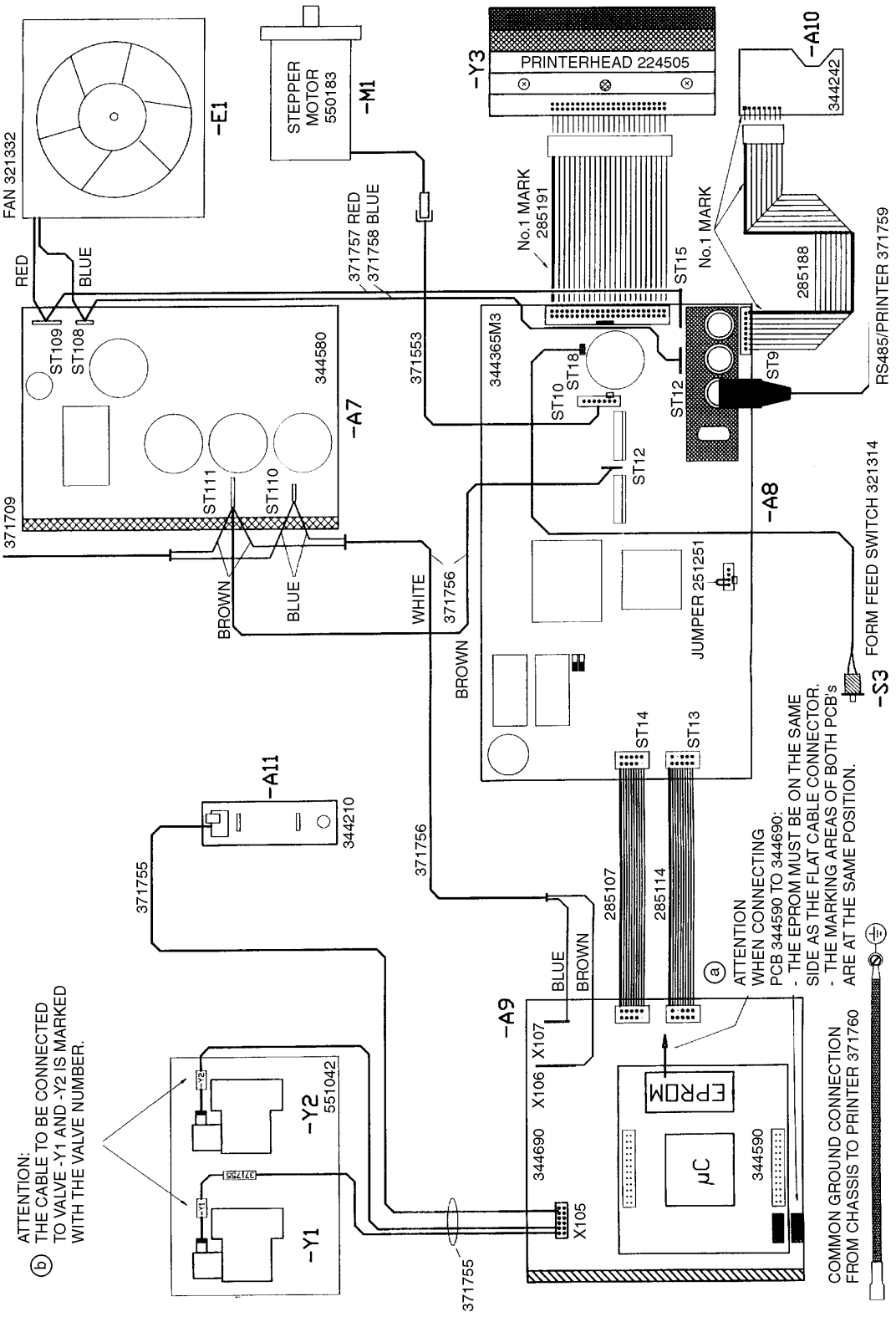

Figure 3.6 Printer

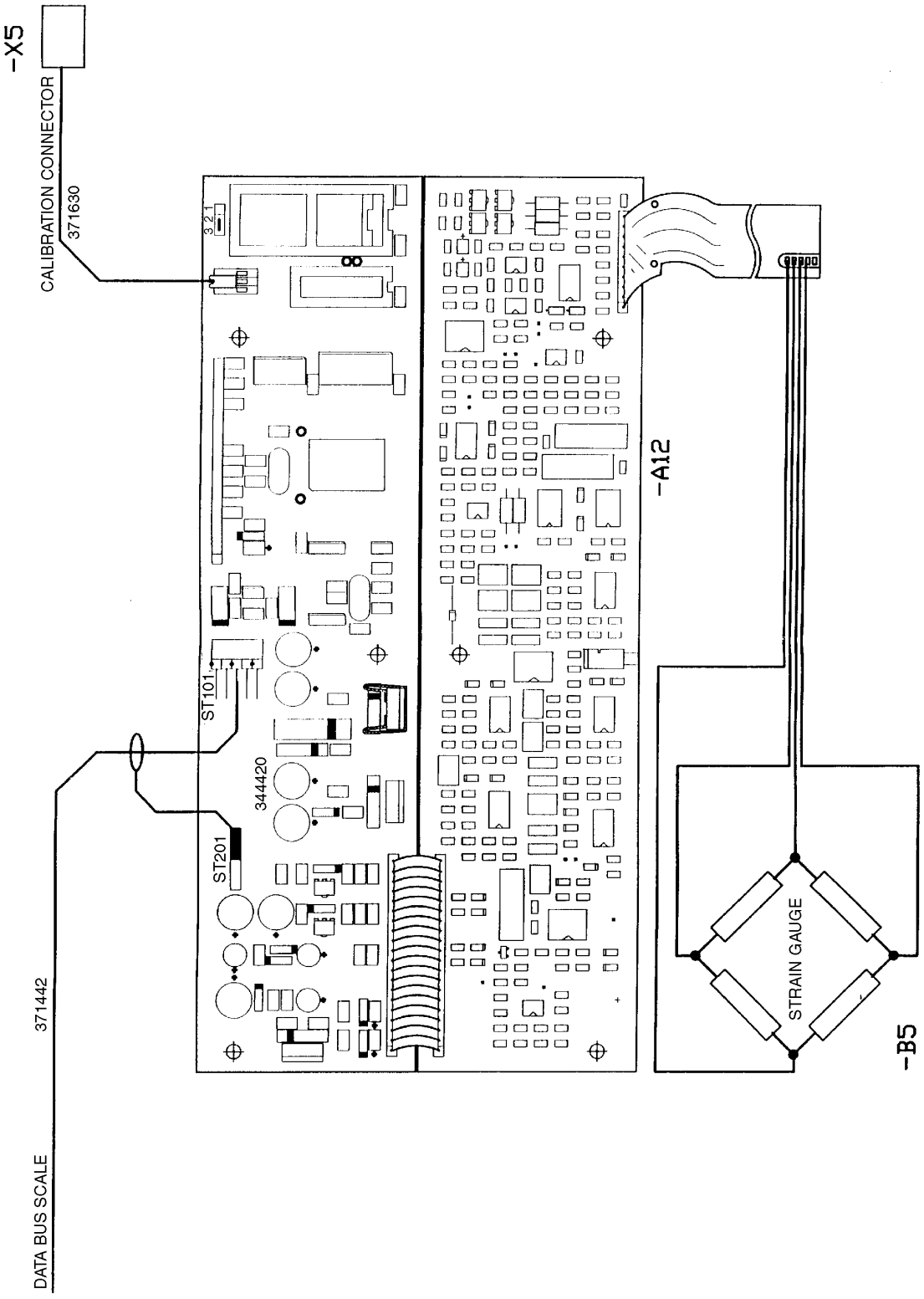

Figure 3.7 Scale

Section 4
Installation

Table of Contents:

4.1 Mains connection

The mains connection is for a voltage of 230 V ac, 50/60 Hz (±8%). The power supply to the machine is to be protected by a 13 Amp fuse. The phase and neutral connections are protected by internal 6.3 Amp fuses.

Caution:

Do not use the switch at the transformer to adjust to higher tolerances of the mains voltage. Only use it to optimise the secondary voltage.

4.2 Equipment checks

(to follow)

4.3 Levelling the machine

Horizontal alignment can be altered by adjusting the levelling feet. These allow for an adjustment range of 40 mm. A levelling indicator is situated in the middle of the weighing conveyor. Ensure the load on the levelling feet is evenly distributed.

4.4 Working height adjustment

The height of the working level (conveyor belts) can be adjusted between 870 mm and 1030 mm. To alter the height carry out the following:

1 Remove the Indicator unit by unscrewing the nut on the top of the retaining plate and then pull the Indicator forward.

2 Disconnect the communications cable/plug unit and the earth connector.

3 Place the Indicator unit in a safe place.

4 Remove the black top plates on each column by undoing the two 6mm allen screws.

5 Remove the two 8 mm allen screws at the rear of each column.

6 Remove the plastic plate in each column. Situated behind each plate is a 12 mm allen screw, which is used to adjust the height. **Simultaneously** turn each screw to reach the required height (turning these screws individually may cause the level of the basic unit to be compromised).

Caution:

Ensure that the cables and tubes are long enough for the new height required.

7 When the desired height is reached ensure that all screws are re–tightened and all plates are replaced.

8 Refit the Indicator unit (reverse of removal).

4.5 Conveyor adjustment

All conveyors are aligned during assembly, therefore they do not require adjustment.

4.6 Installation of the stand–by light barrier

NOTE: *The Stand–by Light Barrier is attached to the inner side of the black plate during transportation.*

NOTE: *The Stand–by Light Barrier is mounted when the B806 System is to be used with additional conveyors. It is mounted to the in–feed conveyor with two screws, and is used as follows:*

Working Mode	3 or 4 Conveyors	Assembly Position
Manual	3 Conveyors	Not required
Within existing conveyor	3 Conveyors	In front of the in–feed conveyor
Manual	4 Conveyors	In the hole of the first conveyor
Within existing conveyor	4 Conveyors	In front of the first conveyor.

4.7 Assembly of the roller system

If no further conveyors are to be included with the B806 System, the roller system is to be mounted after the labelling conveyor. The roller system consists of four plastic rollers contained within a stainless steel frame. The frame also contains a device for preventing labels being transported underneath the labelling conveyor.

This frame is attached by four screws, and can be mounted in three positions to allow for long packs extension.

Section 5

Configuration and Operation

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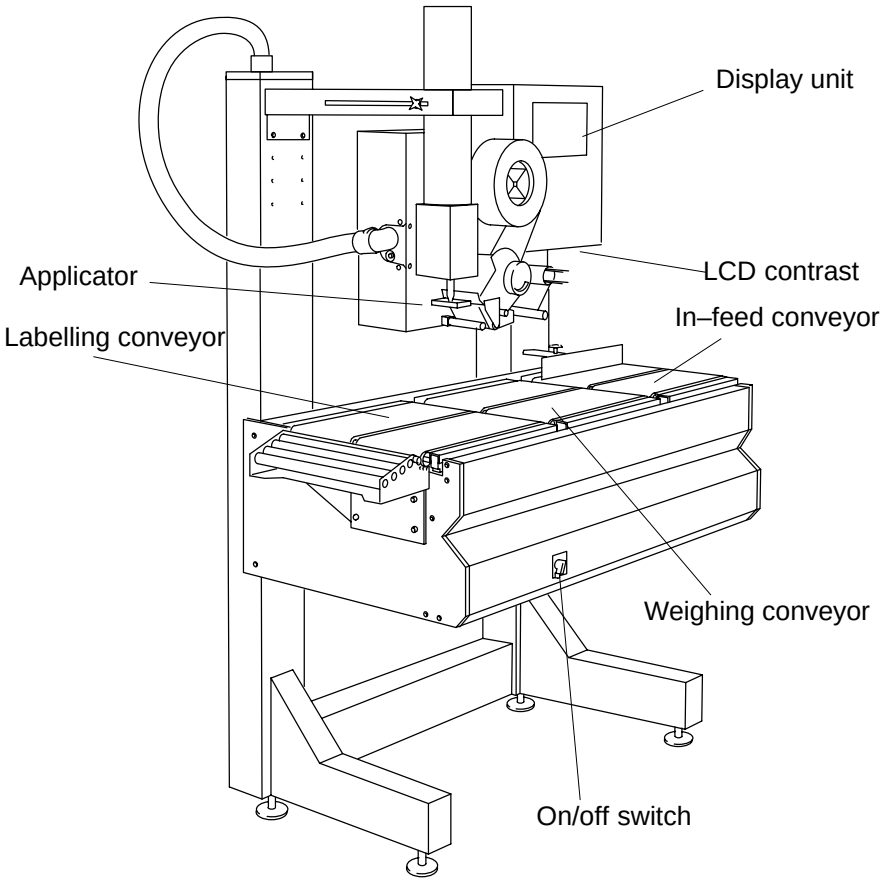
5.1 About the B806



The B806 has three conveyor belts controlled by light barriers (sensors).

- In–feed conveyor

As soon as a pack passes the light sensor the conveyor starts automatically and the pack is transferred to the weighing conveyor. The second light sensor is positioned between the two conveyors to prevent overlap.

- Weighing conveyor

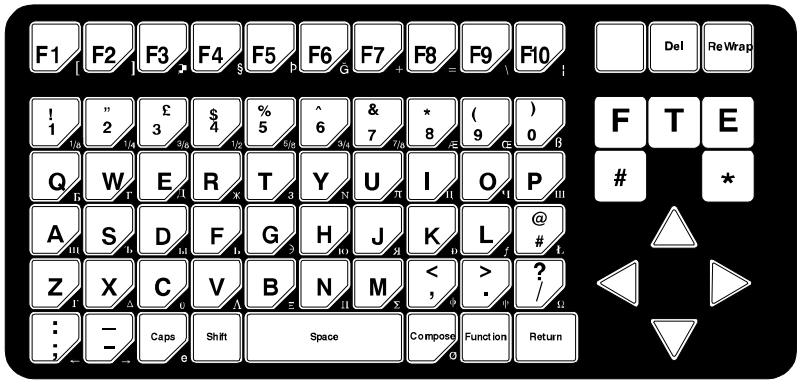
The third light sensor is on the weighing conveyor. It acts as a stop to ensure the pack is correctly positioned for weighing.

- Labelling conveyor

The label is applied to the pack as it travels along the belt.

WARNING:
Do not attempt to remove packs or misplaced labels while the belts are in motion.

5.1.1 Keyboard



5.1.2 Mode of operation

The B806 can operate in three different ways:

- Automatic
- Manual
- Transport

Automatic operation

This is the default mode of operation for the machine.

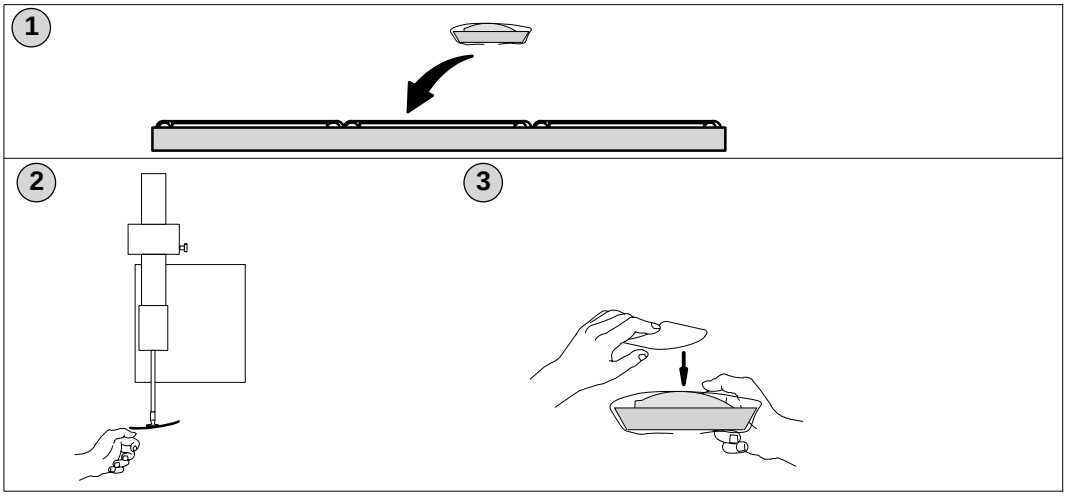
When a pack is placed on the in–feed conveyor, so that it obscures or partially obscures the light barrier, it is transferred automatically to the weighing conveyor and weighed. It is then transferred to the labelling conveyor and labelled.

Manual operation

You can select manual operation by pressing F5 after entering all the data in a PLU.

Press F4 to change back to auto.

Labelling by hand

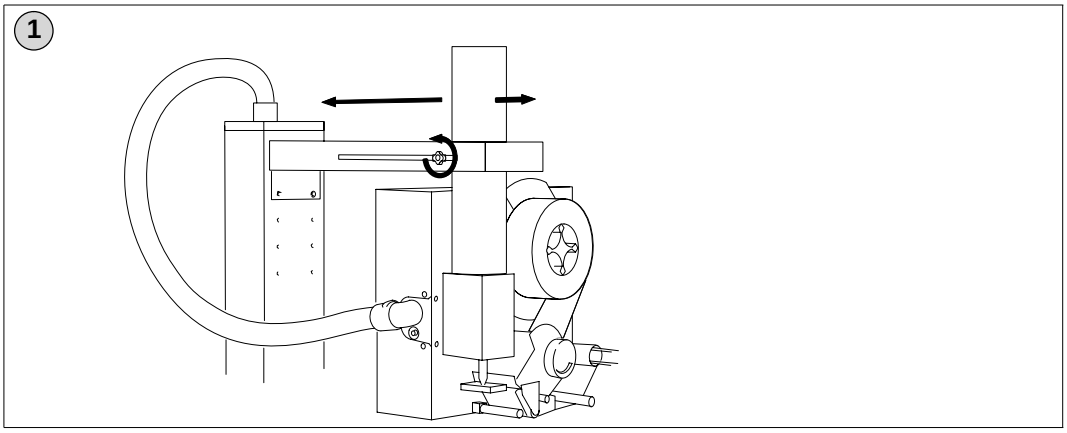


Transport operation

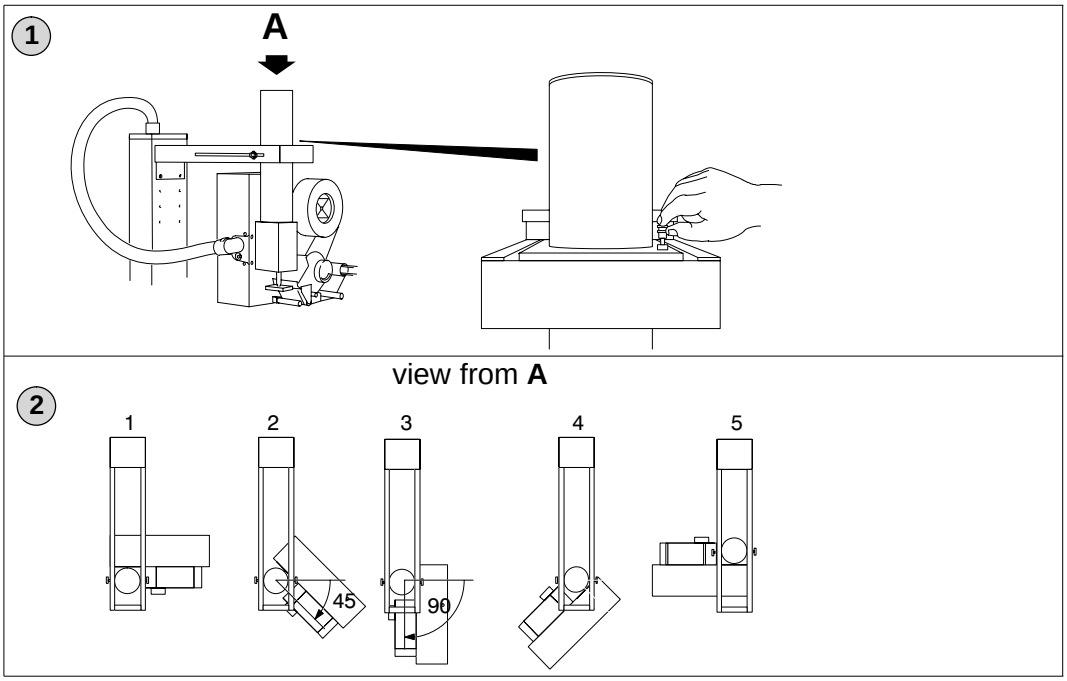
You can select transport operation by pressing F6 after entering all the data in a PLU. This mode of operation disables the weighing and labelling functions but allows the conveyors to operate. The pack passes through the B806 without stopping.

5.1.3 Adjusting the machine

Across the bed label position

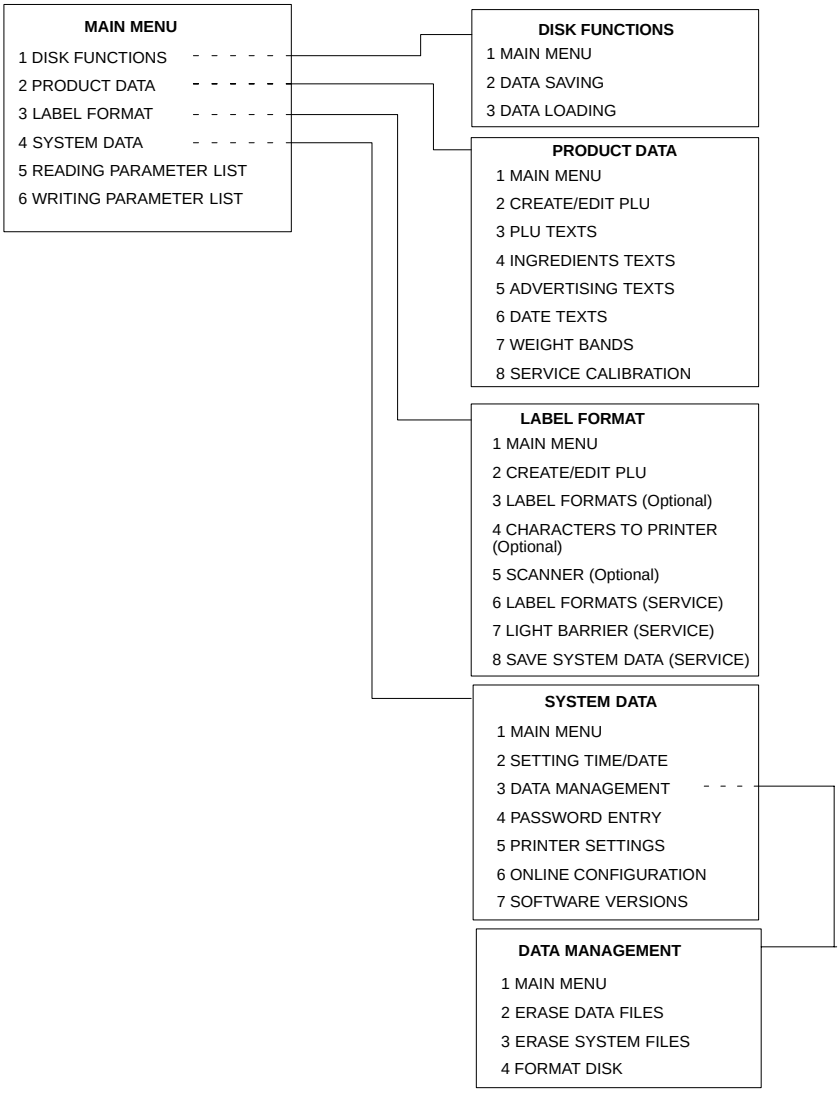


Rotating the printer/applicator



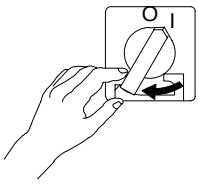
5.1.4 Operator menus

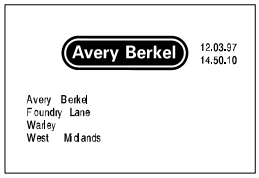
Use this page to tell you where to find an option if you cannot remember which menu it is in.



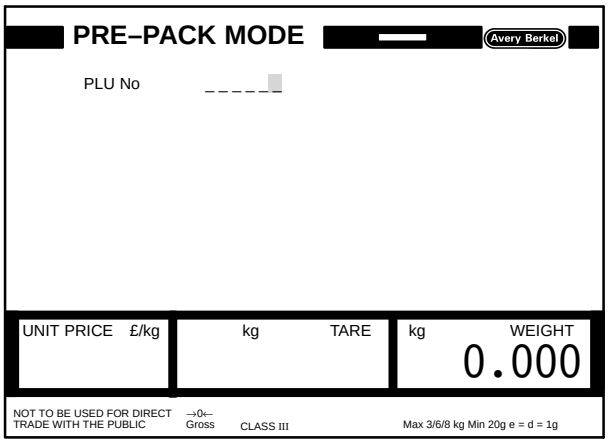
5.1.5 Starting the machine

1





2 Press any key.
The machine will take approximately 45 secs to initialise and find zero then you will see



5.2 PLU functions

You will not be able to print labels unless at least one PLU has been programmed.

You must assign a label format to a PLU.

The PLU defines

- the information that you must enter when creating the PLU
- the information that will be printed on the label
- the labelling mode
- the label format used to print totals labels
- the machine performance settings associated with the product to be labelled.

5.2.1 PLU file structure

Product information

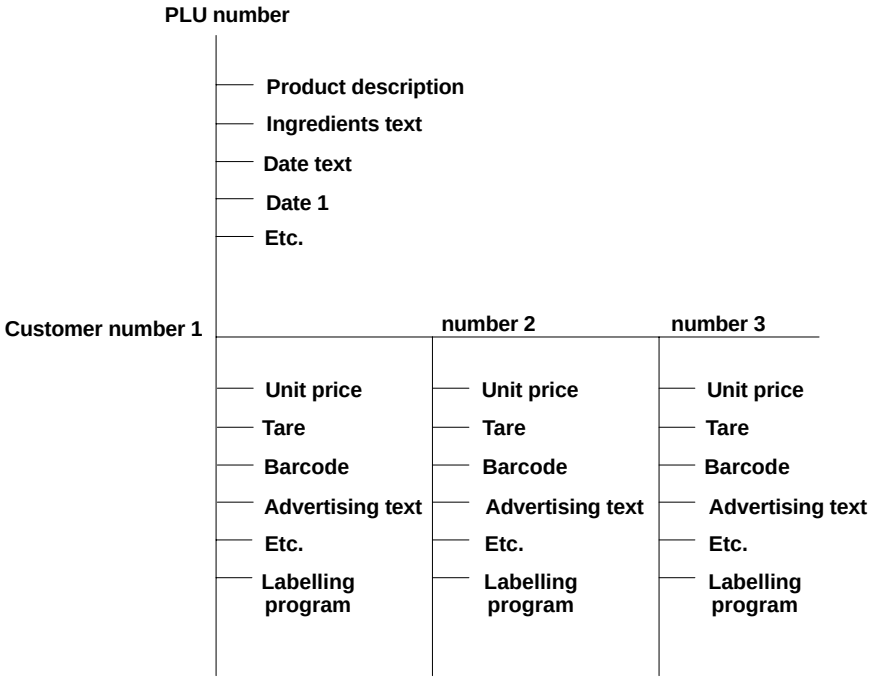
Information that applies to the product such as ingredients text, shelf life, is stored under the PLU number.

Customer number

Provided that your machine has been configured for it, several customers may be associated with one PLU. Each customer may require different labelling, unit prices, containers etc. Each customer is assigned a unique number identifying their requirements which is linked to the PLU. Storing this variable data under a customer number means that the same PLU can be used for several different customers reducing the storage space needed for data.

Customer information

Information that may vary for different customers such as customer address, bar codes, containers, is stored under the customer number.



Texts

PLU, ingredients, sales message and date texts may be entered directly while creating a PLU or may be created separately in the relevant programs and stored under a unique number. The texts can then be used as often as required for any number of customers and PLUs.

5.2.2 Create and edit PLUs

The following procedure shows how to create a typical PLU. The actual data that you would enter for a particular PLU will depend on the label format selected and the customer number, if any.

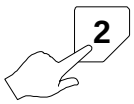
You will be prompted for the data required and the screen display will indicate how many characters are available for that entry.

The prompts that you see on your display screen may differ from those in this book. This is because the prompts that are shown depend upon the field definition list and the label format selected.

You can save at any time by pressing F3 .

Press **F** to return to Main Menu.

1

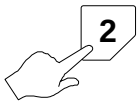


select menu

PROGRAM MENU Avery Berkel

MAIN MENU
1 DISK FUNCTIONS
2 PRODUCT DATA
3 LABEL FORMAT
4 SYSTEM DATA

2

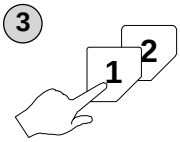


select option

PROGRAM MENU Avery Berkel

PRODUCT DATA
1 MAIN MENU
2 CREATE/EDIT PLU
3 PLU TEXTS
4 INGREDIENTS TEXTS
5 ADVERTISING TEXTS
6 DATE TEXTS
7 WEIGHT BANDS

3



PLU number

CREATE/EDIT PLU Avery Berkel

PLU No 12

4

CREATE/EDIT PLU Avery Berkel

PLU No 12
Label format no

5

label format

CREATE/EDIT PLU Avery Berkel

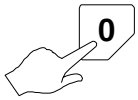
PLU No 12
Label format no 2

6

CREATE/EDIT PLU Avery Berkel

PLU No 12
Label format no 2
Index no.

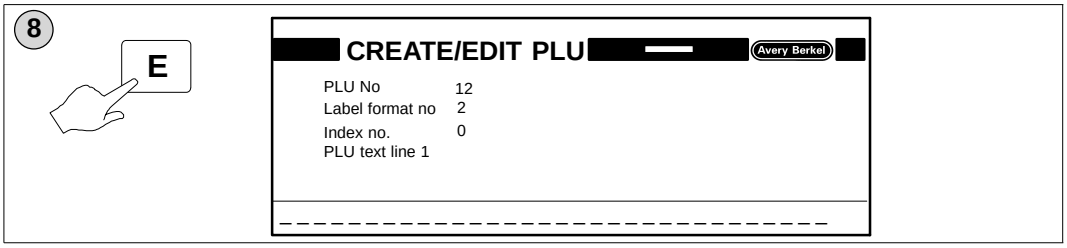
7



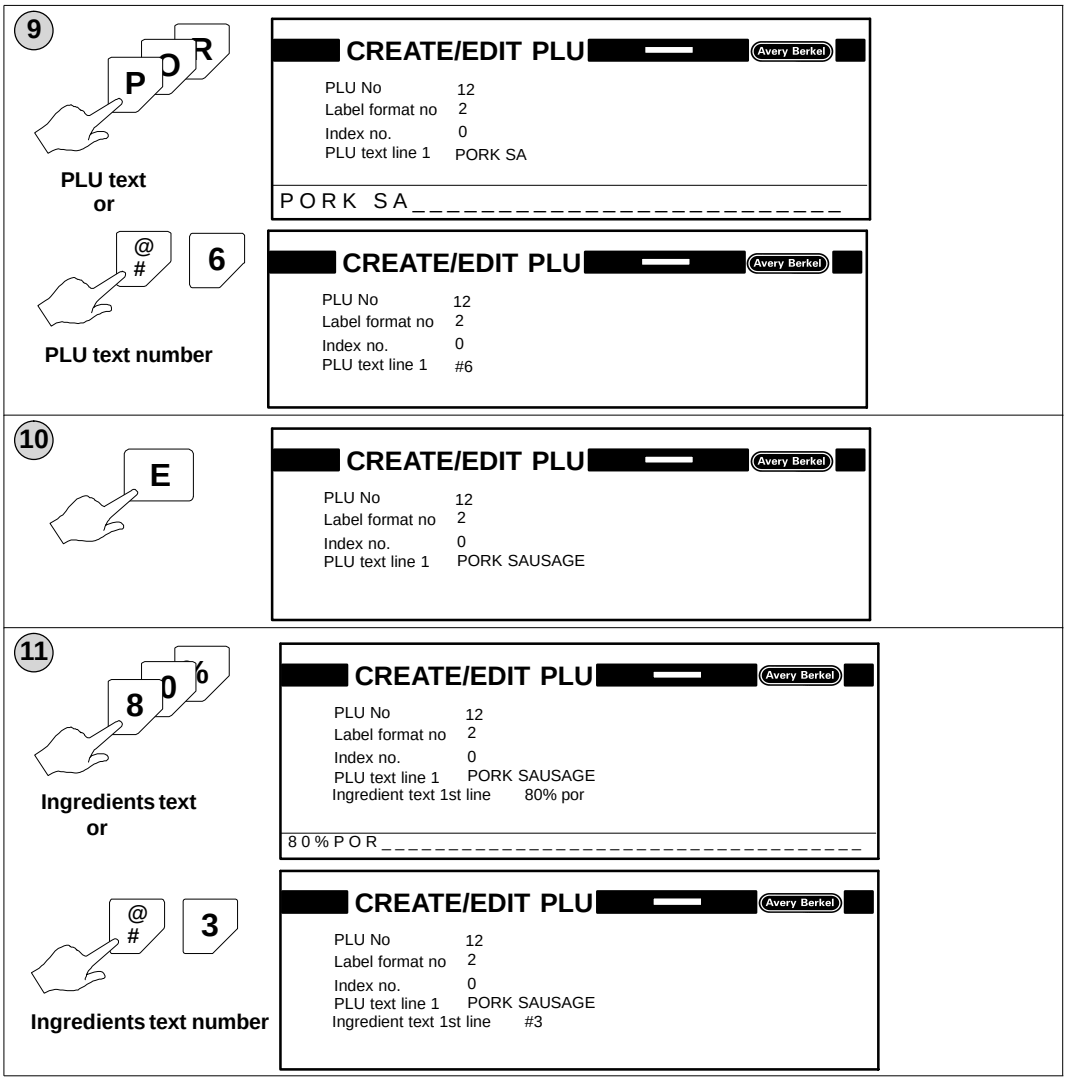
Index number

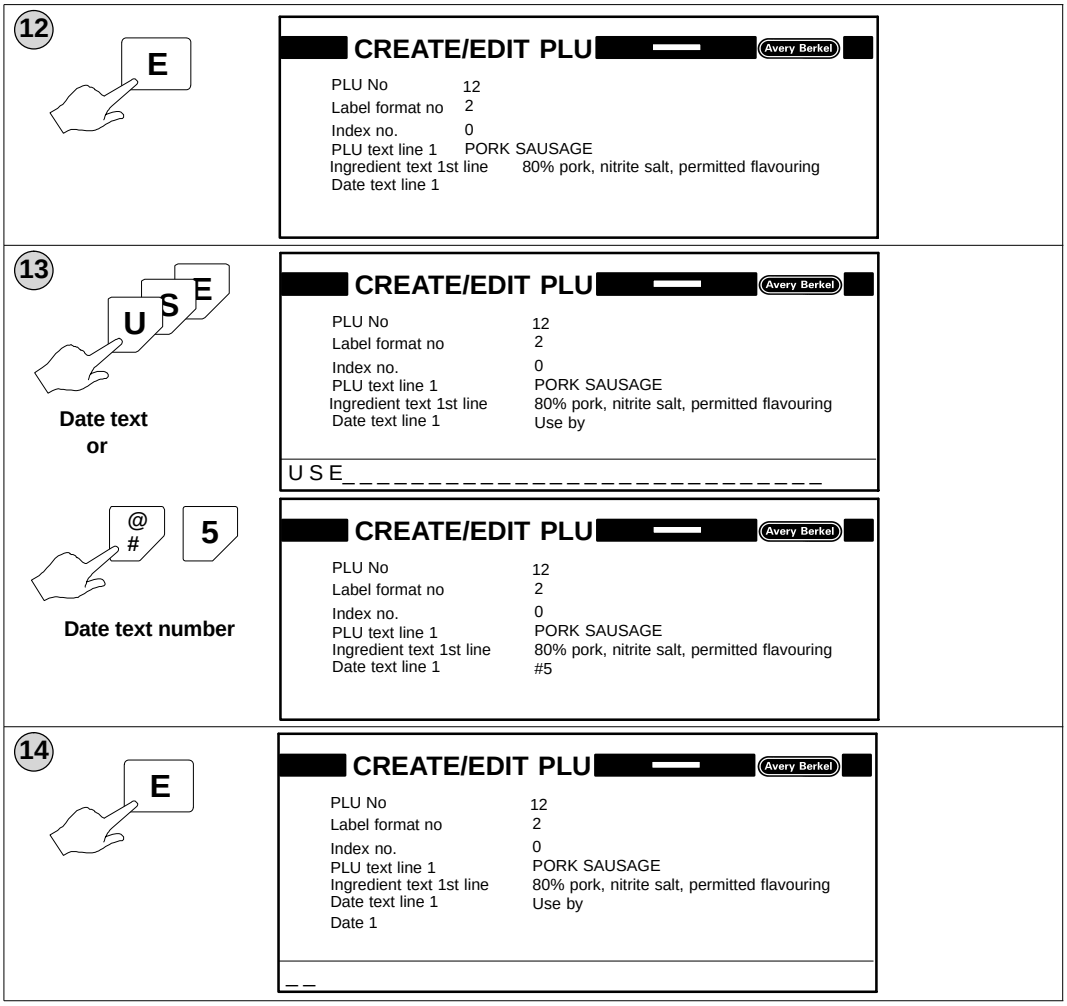
CREATE/EDIT PLU Avery Berkel

PLU No 12
Label format no 2
Index no. 0

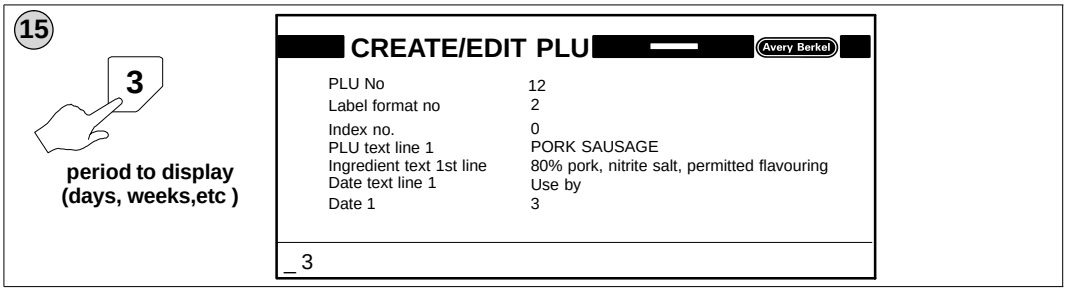


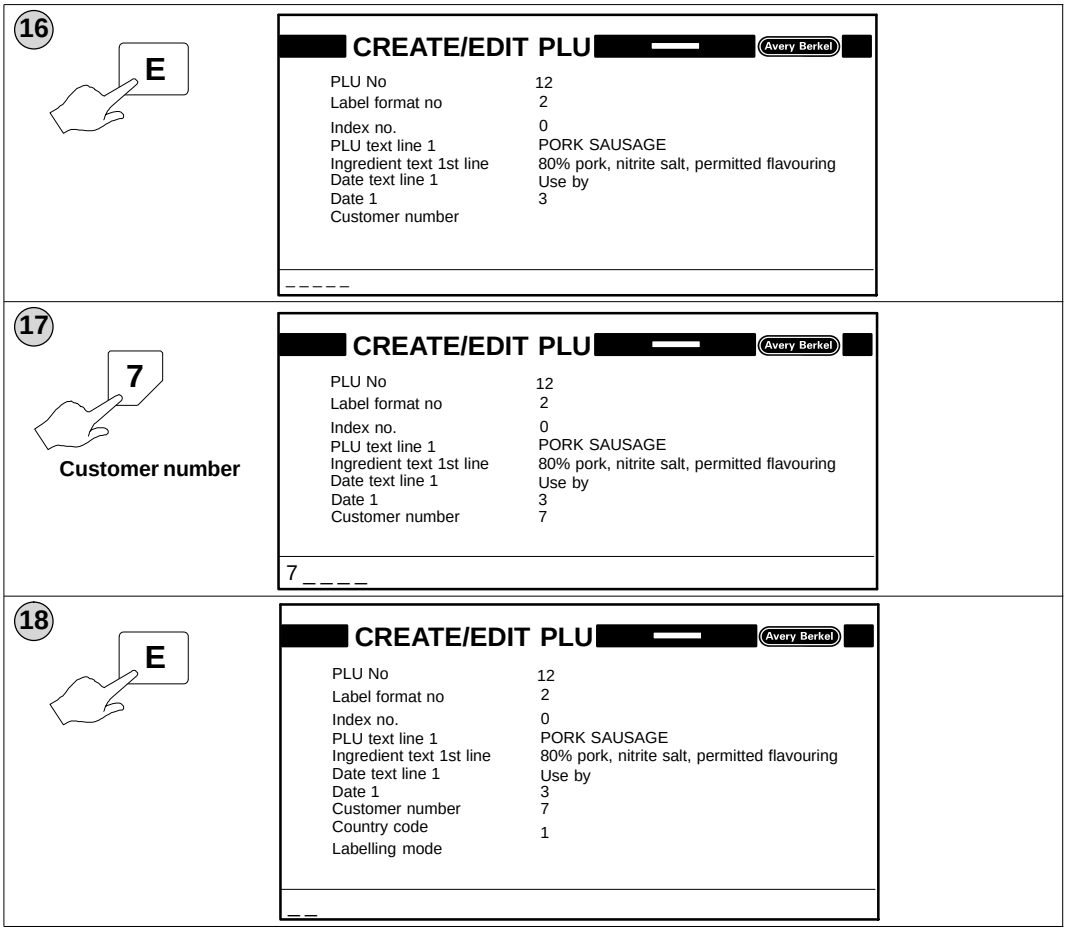
NOTE: *PLU text line 1 and PLU text line 2 are displayed and can be used to identify the product. Printing of these text lines can be suppressed (see Field Identification, page 5.52).*





NOTE: *For information about date format and offset values see* ***Creating date texts****, section 5.2.6, page 5–21.*





Labelling mode

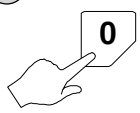
The labelling mode determines whether the weight value printed on the label uses the weight derived from the scale or is a fixed weight value. Listed below are the labelling modes available and the data that must be entered for each mode.

0 = Price labelling by scale
This is the normal Catch Weight operation where the net weight is established by the scale and then multiplied by the unit price to generate a Price to Pay.

You can enter the tare and unit price when creating or editing PLUs or when you select the PLU in Pre–pack Mode, depending on which labelling program is defined within the PLU.

0 =	Price labelling by scale	Enter tare and unit price
1 =	Fixed price	Enter fixed price
2 =	Fixed weight	Enter fixed weight
3 =	Fixed price and quantity	Enter quantity and fixed price
4 =	Fixed price and weight	Enter fixed price and fixed weight
5 =	Fixed unit price and weight	Enter unit price and fixed weight

19



Labelling mode

CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	3
Customer number	7
Country code	1
Labelling mode	

0 _

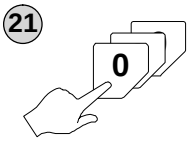
20

CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	3
Customer number	7
Country code	1
Labelling mode	0
Tare	0.00kg

_ _ _ _

21



Tare

CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	3
Customer number	7
Country code	1
Labelling mode	0
Tare	0.015kg

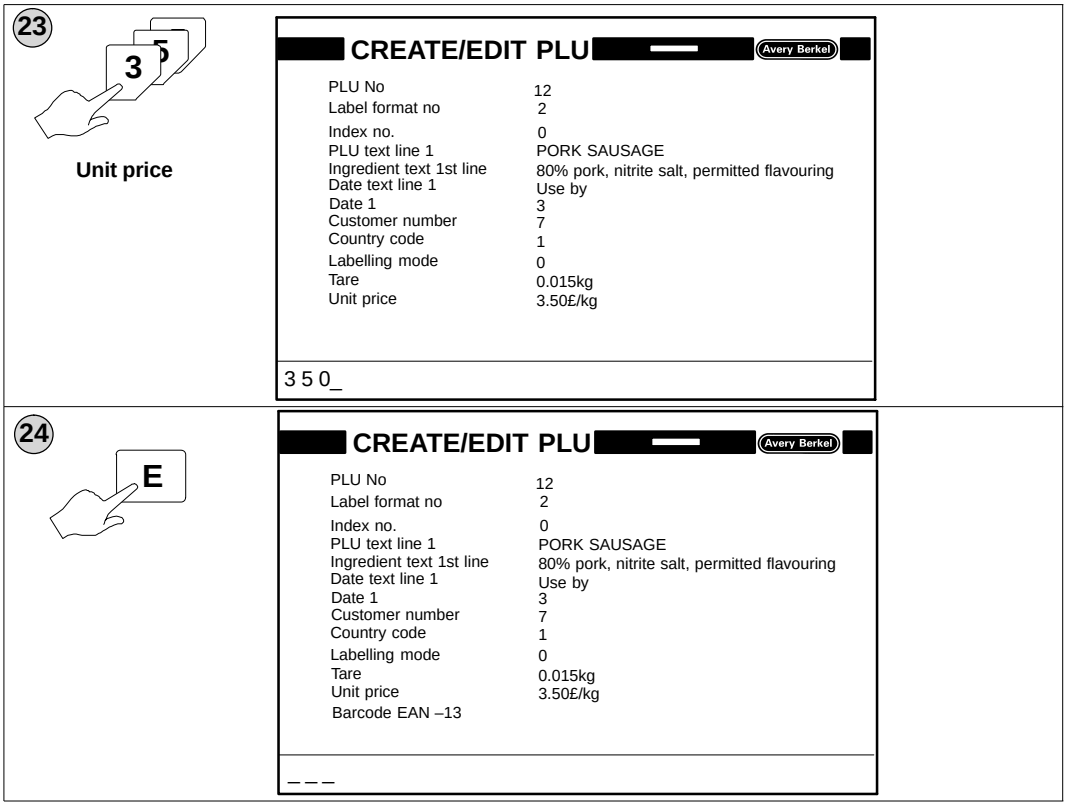
0.015

22

CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	3
Customer number	7
Country code	1
Labelling mode	0
Tare	0.015kg
Unit price	0.00£/kg

_ _ _ _



EAN 13 Barcodes

The field definition list must include the type of barcode to be used. You enter the barcode format number to call up a stored barcode format or you can enter 13 fixed digits.

For example:
the barcode format number #1 indicates that price information will be embedded in the barcode.

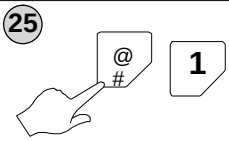
#1 = EAN13 price

the barcode format number #4 indicates that weight information will be embedded in the barcode.

#4= EAN13 weight

Barcode format number	Barcode structure	Barcode type
1	FFAAAAXPPPPPC	EAN–price
2	FFAAAAXGGGGGC	EAN–weight
3	FFAAAAAYPPPPC	EAN–price
4	FFAAAAAGGGGGC	EAN–weight
7	FFAAAAAYGGGGC	EAN–weight
8	FFAAAAAPPPPPC	EAN–price

25



Barcode format number

CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	3
Customer number	7
Country code	1
Labelling mode	0
Tare	0.015kg
Unit price	3.50£/kg
Barcode EAN –13	#1

#1_ _

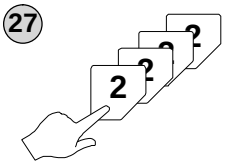
26

CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	3
Customer number	7
Country code	1
Labelling mode	0
Tare	0.015kg
Unit price	3.50£/kg
Barcode EAN –13	#1
Article No	

_ _ _

27



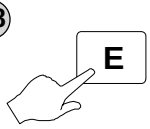
Article number

CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	3
Customer number	7
Country code	1
Labelling mode	0
Tare	0.015kg
Unit price	3.50£/kg
Barcode EAN –13	#1
Article No	2222

2 2 2 2

28

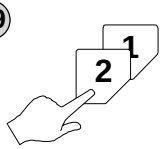


CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	3
Customer number	7
Country code	1
Labelling mode	0
Tare	0.015kg
Unit price	3.50£/kg
Barcode EAN –13	#1
Article No	2222

_ _ _

29



Flag number

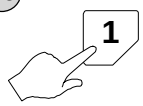
CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	3
Customer number	7
Country code	1
Labelling mode	0
Tare	0.015kg
Unit price	3.50£/kg
Barcode EAN –13	#1
Article No	2222
Flag No	21

2 1 _

When you have entered all the required data you will see the message

30



save data

CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	3
Customer number	7
Country code	1
Labelling mode	0
Tare	0.015kg
Unit price	3.50£/kg
Barcode EAN –13	#1

SAVE ?Yes = 1 No = 0

You may need to enter other items of data in addition to the examples shown. These could include:

Advertising text Line 1
Advertising text Line 2
Advertising text Line 3
Advertising text Line 4
Labelling program number
PLU number Total 1
PLU number Total 2
PLU number Total 3
PLU number Total 4
Product Group number
Label position (1 – 255)
Applicator force (1 – 127)
Conveyor stop (0 – 3)
Conveyor speed (0 – 2)

For descriptions of these items see page 5–32.

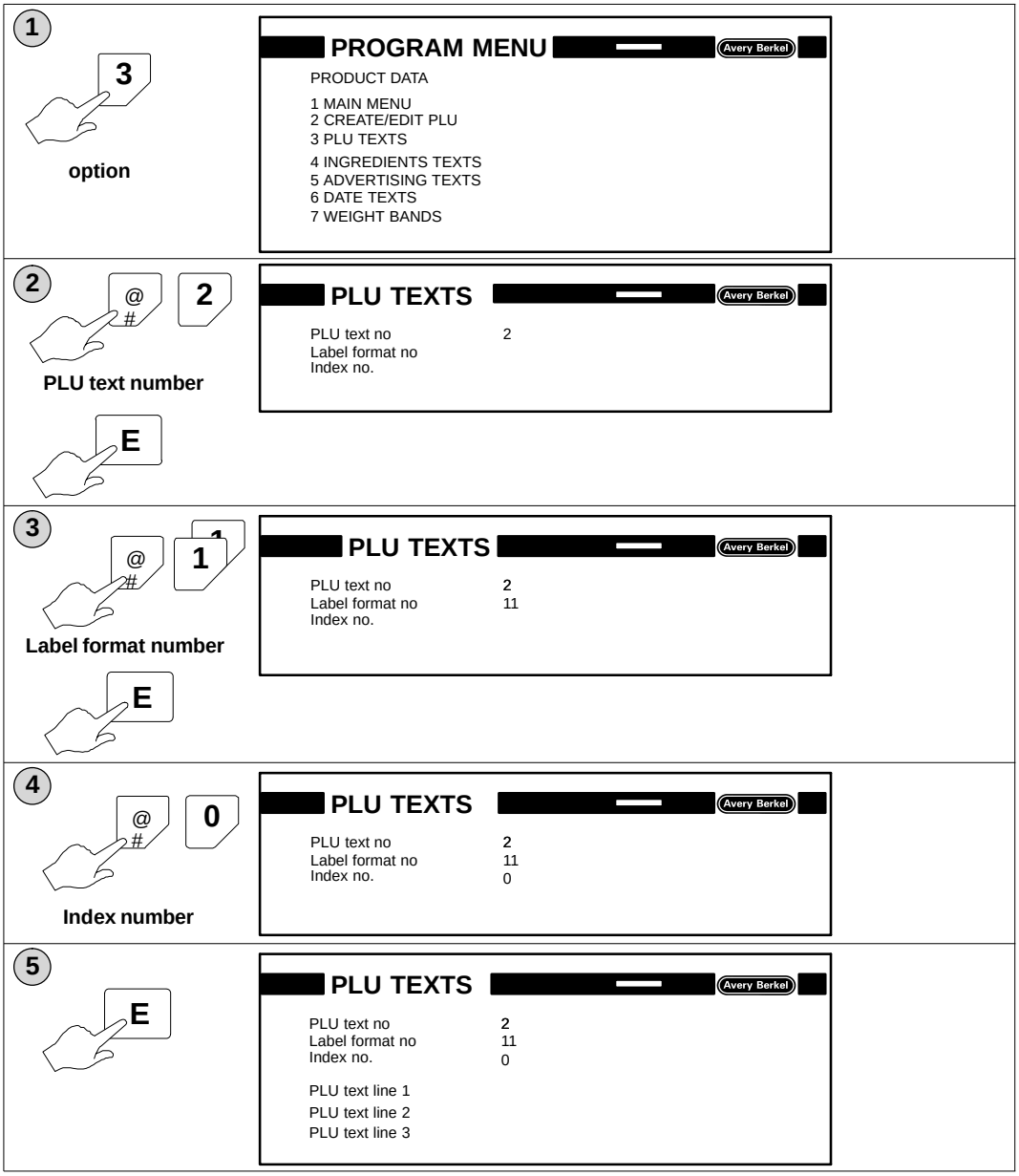
5.2.3 Creating PLU texts

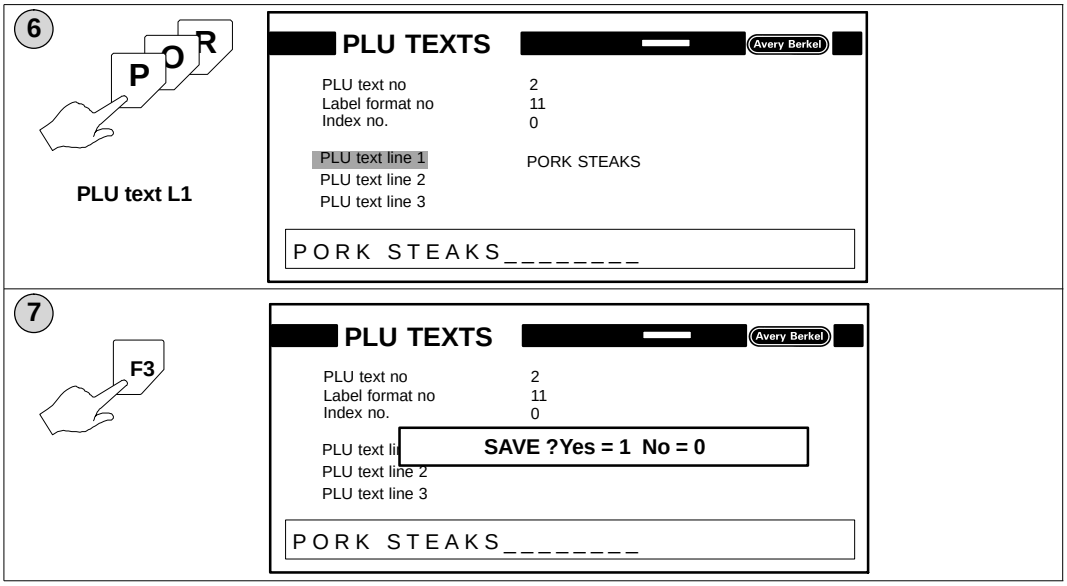
A PLU text is stored under a number which is unique within the PLU text area. You may then assign it to a PLU when using the Create/Edit PLU option by inserting the PLU text number in the appropriate line in the PLU.

Use the same label format and index numbers that you will use in the PLU to ensure that the number of lines and characters matches the label.

You can save at any time by pressing F3 .

Press F to return to Main Menu.



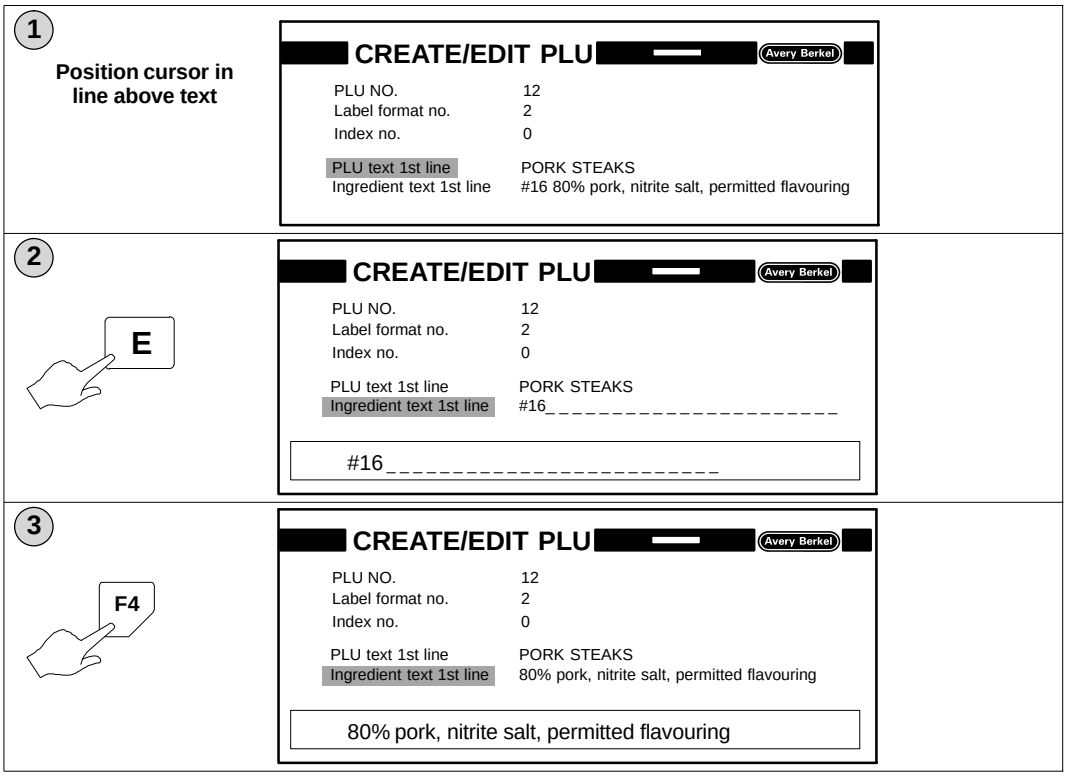


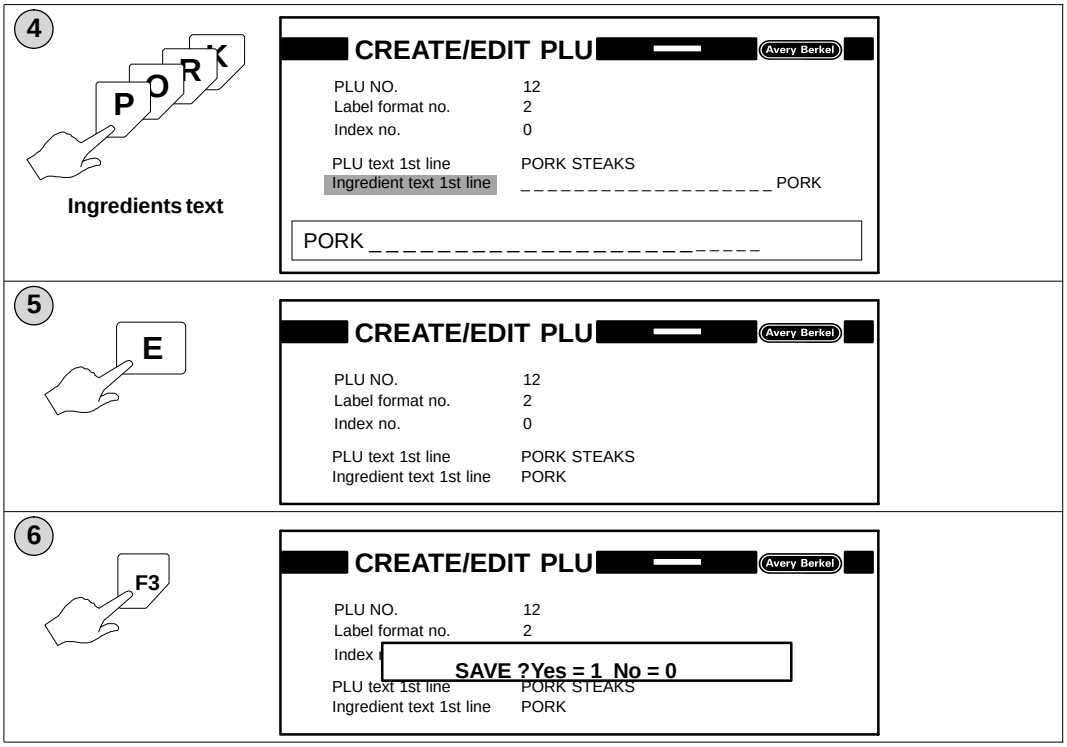
Editing PLU contents

You can change the content of a stored text after it has been assigned to a PLU. The example given is for ingredients text but the method will be the same for other stored texts.

To view the ingredients text 1st line, position the cursor in the row above.

The changes will only apply to the text within the PLU. The text stored under the appropriate text number will not be affected.





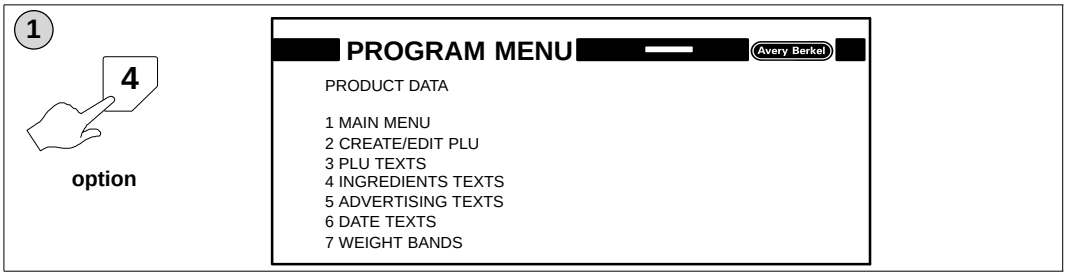
5.2.4 Creating ingredients texts

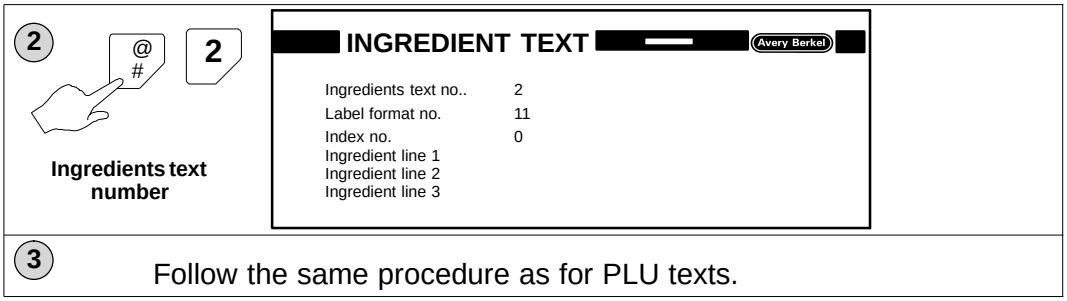
An ingredients text is stored under a number which is unique within the ingredients text area. You may then assign it to a PLU when using the Create/Edit PLU function by inserting the PLU text number in the appropriate line in the PLU.

Use the same label format and index numbers that you will use in the PLU to ensure that the number of lines and characters matches the label.

You can save at any time by pressing F3 .

Press F to return to Main Menu.





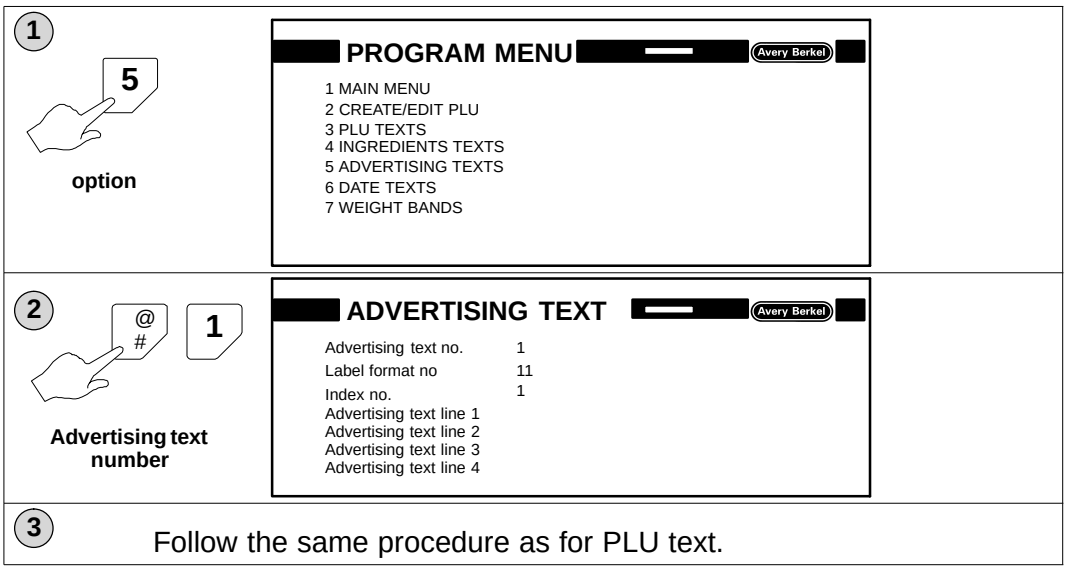
5.2.5 Creating advertising texts

An advertising text is stored under a number which is unique within the advertising text area. You may then assign it to a PLU when using the Create/Edit PLU function by inserting the PLU text number in the appropriate line in the PLU.

Use the same label format and index numbers that you will use in the PLU to ensure that the number of lines and characters matches the label.

You can save at any time by pressing F3 .

Press F to return to Main Menu.



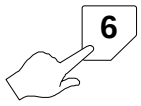
5.2.6 Creating date texts

A date text is stored under a number which is unique within the date text area. You may then assign it to a PLU when using the Create/Edit PLU function by inserting the date text number in the appropriate line in the PLU.

Use the same label format and index numbers that you will use in the PLU to ensure that the number of lines and characters matches the label.

You can save at any time by pressing F3 .

1

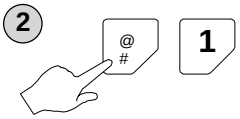


option

PROGRAM MENU

PRODUCT DATA
1 MAIN MENU
2 CREATE/EDIT PLU
3 PLU TEXTS
4 INGREDIENTS TEXTS
5 ADVERTISING TEXTS
6 DATE TEXTS
7 WEIGHT BANDS

2



Date text number

DATE TEXTS

Date text no.. 1
Ingredient text 1st line 11
Index no. 0
Date text line 1
Date text line 2

3 Follow the same procedure as for PLU text.

Date offset value and format

Date offset texts have two components, the date offset value and the date offset format.

When programming a PLU, you can enter the date offset value for a product as days, half days, weeks, months or years by inserting the appropriate identification code before the date. You may also change the way the date is printed by entering a different date offset format.

If you only enter a date offset value the printed date text will use the date offset format set for the machine.

To enter a date offset value and a different date offset format, enter the date offset value followed by a semi–colon and then the date offset format.

Example:
If today's date is 17.08.1999 then

1 5 ; TT.D2JJJJ
means 5 days from today's date printed as 22 AUG 1999

2 K8 ; a
means 8 calendar weeks from today's date printed as 8.

3 m3 ; H
means 3 months from today's date printed as 90 (days).

Identification codes for date offset values

h10	=	10 half days
K10 or k10	=	10 calendar weeks (at 7 days each)
M10 or m10	=	10 months (at 30 days each)
J10 or j10	+	10 years (at 365 days each)

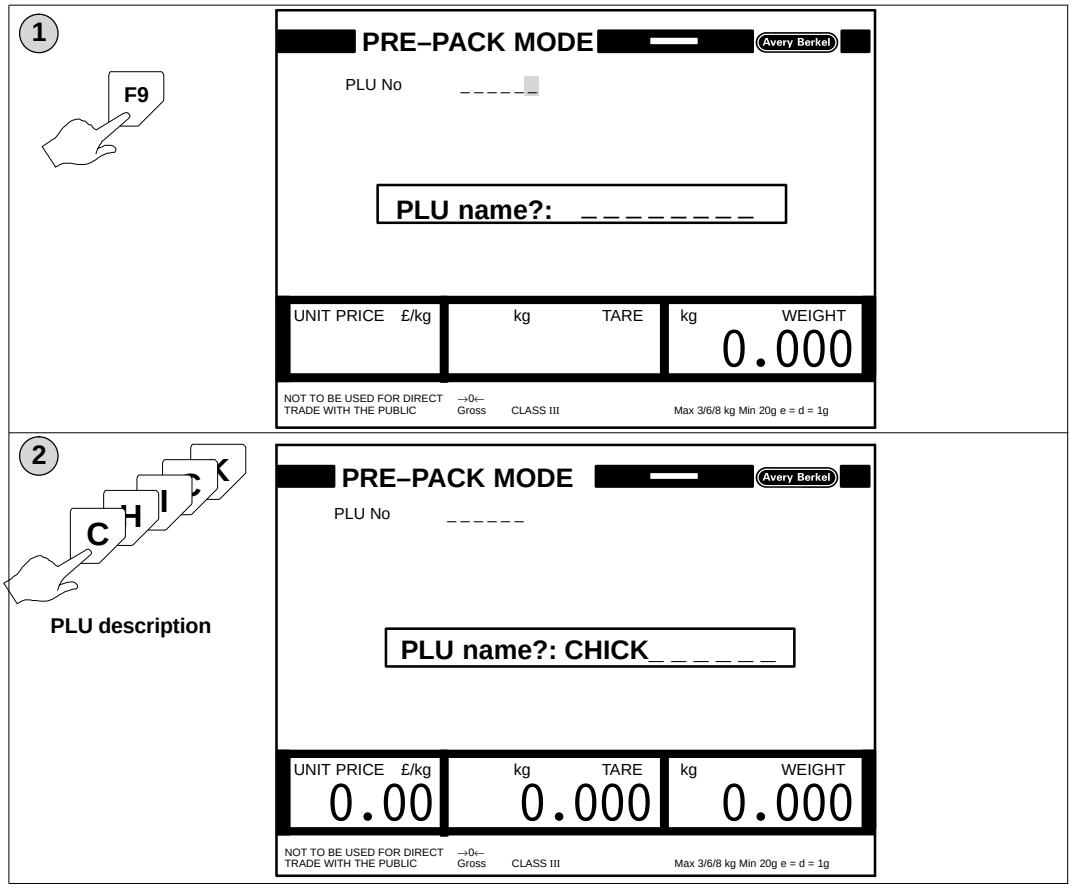
Identification codes for date offset formats

t	Prints days without preceding zeros
T	Prints days with preceding zeros
m	Prints months without preceding zeros
M	Prints months with preceding zeros
J	Prints years
J	last digit (9 = 1999)
JJ	last two digits (99 = 1999)
JJJ	last three digits (999 = 1999)
JJJJ	all four digits (1999 = 1999)
k	Date as calendar week (with preceding zero)
K	Date as calendar week (without preceding zero)
h	Duration in $^1/_2$ days (without preceding zero)
H	Duration in 1/1 days (without preceding zero)
a	Duration in weeks (without preceding zero)
A	Duration in weeks (with preceding zero)
b	Duration in months (without preceding zero)
B	Duration in months (with preceding zero)
c	Duration in years (without preceding zero)
C	Duration in years (with preceding zero)
d	Duration in months (alpha character in full)
D	Duration in months (3 alpha characters)
g	Year days number (without preceding zero)
G	Year days number (with preceding zero)

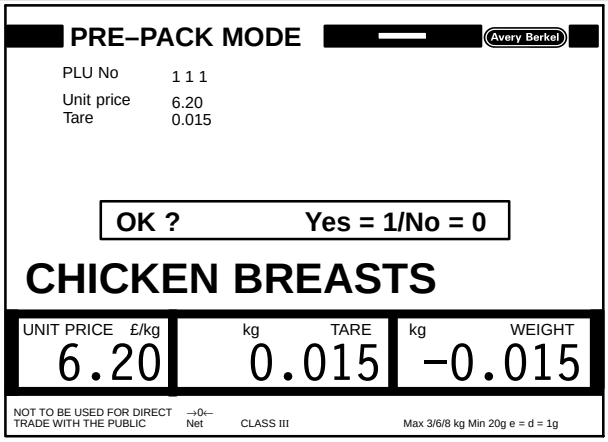
5.2.7 PLU search

If you do not know the PLU number for the product you can search for it by pressing F9 and entering all or part of the PLU description. When only part of the PLU description is entered the first PLU containing the text entered will be displayed. If you press 0 then E the next PLU description containing the entered text will be displayed.

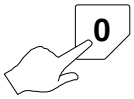
Press F10 at any time to exit PLU search or if you cannot find the PLU you want.

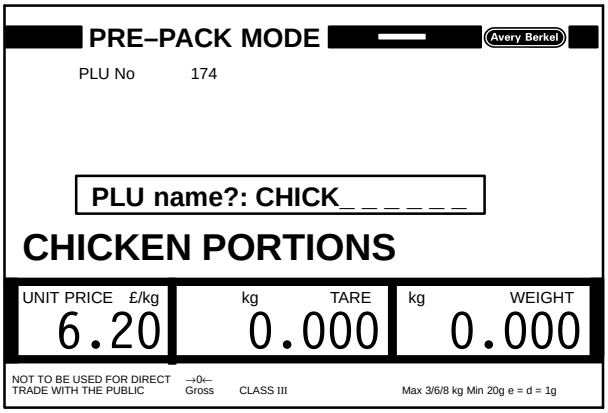


3

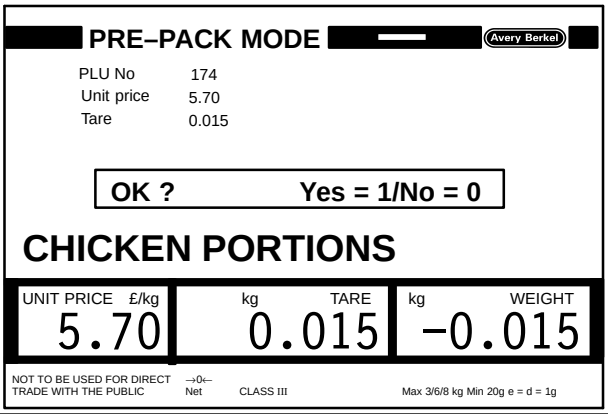


4

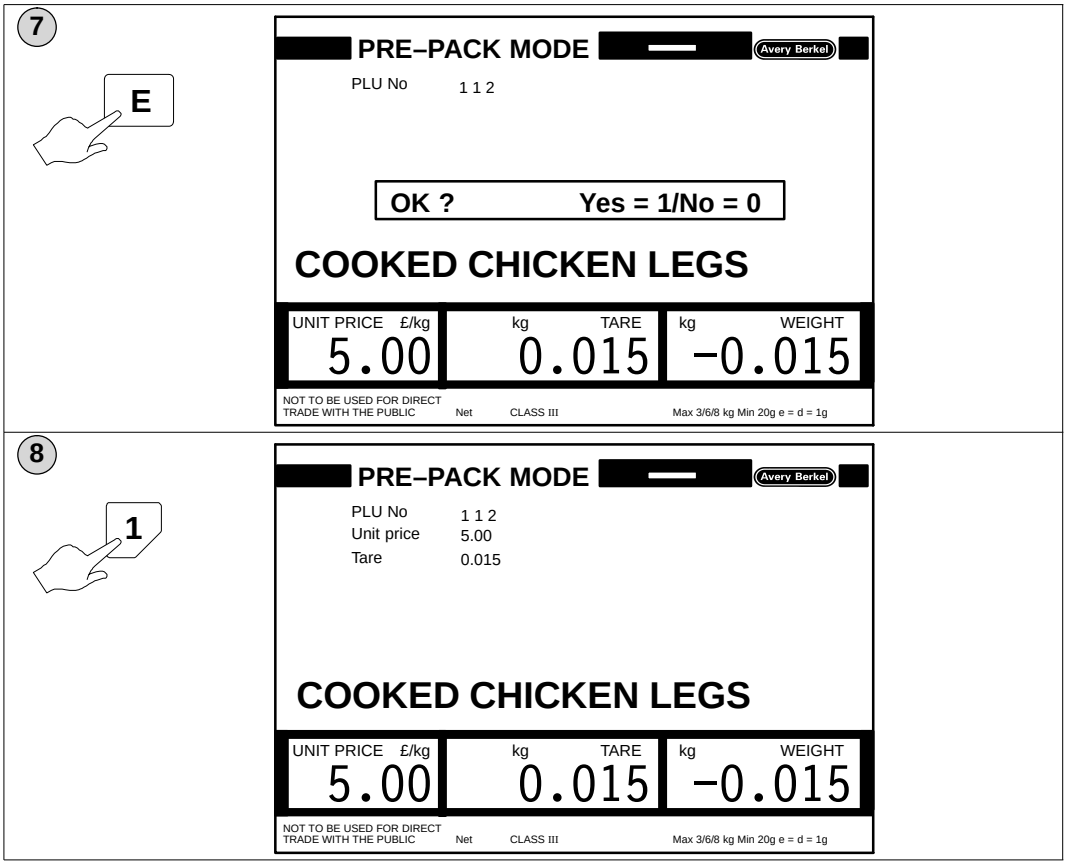




5



6 Repeat steps 4 and 5 until you see the PLU you want.



If no matching text is found the display reverts to the original PLU entered.

5.2.8 Browsing

You can search for a PLU, PLU text, ingredients text, sales messages and date texts by paging through the PLUs and stored texts.

The type of text displayed depends on the menu option selected. For example, if you are in the Ingredients Texts menu you will be able to search for ingredients texts.

Texts are displayed in the order in which they were programmed.

Key functions

F8	Displays the first PLU or text stored. Press again to display the next stored text.
△	Page up.
F7	Back to first text. If you see _ _ _ _ _ displayed you are at the end of the texts stored.

Return / E	Accepts the displayed text for processing.
F	Return to labelling operation.
F1	Delete.
F2	Back to label format number. This is the only method of changing the label format in a PLU. It can be used to copy the contents of a label format to another label format number.
F3	Save.
F6	Insert text.
F10	Back to beginning/exit browse program.

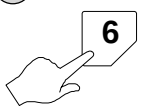
5.2.9 Copying PLU data

Stored PLUs and texts may be copied and given new unique numbers. The example is for date texts but the procedure is the same for all the types of stored PLU data.

Only PLU numbers with a **customer number 0** may be copied.

Press **F** to return to Main Menu.

1

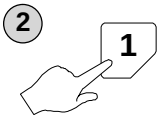


option

PROGRAM MENU Avery Berkel

1 MAIN MENU
2 CREATE/EDIT PLU
3 PLU TEXTS
4 INGREDIENTS TEXTS
5 ADVERTISING TEXTS
6 DATE TEXTS
7 WEIGHT BANDS

2



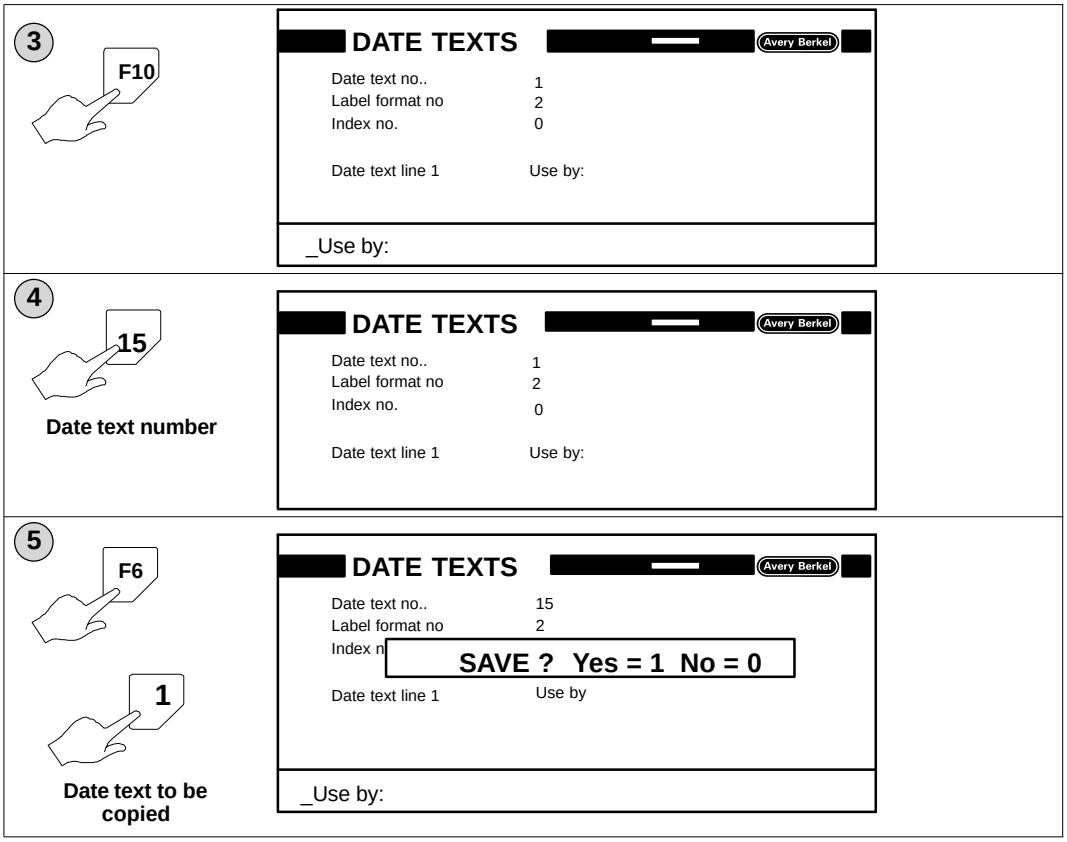
Date text number

DATE TEXTS Avery Berkel

Date text no.. 1
Label format no 2
Index no. 0

Date text line 1 Use by:

_Use by:

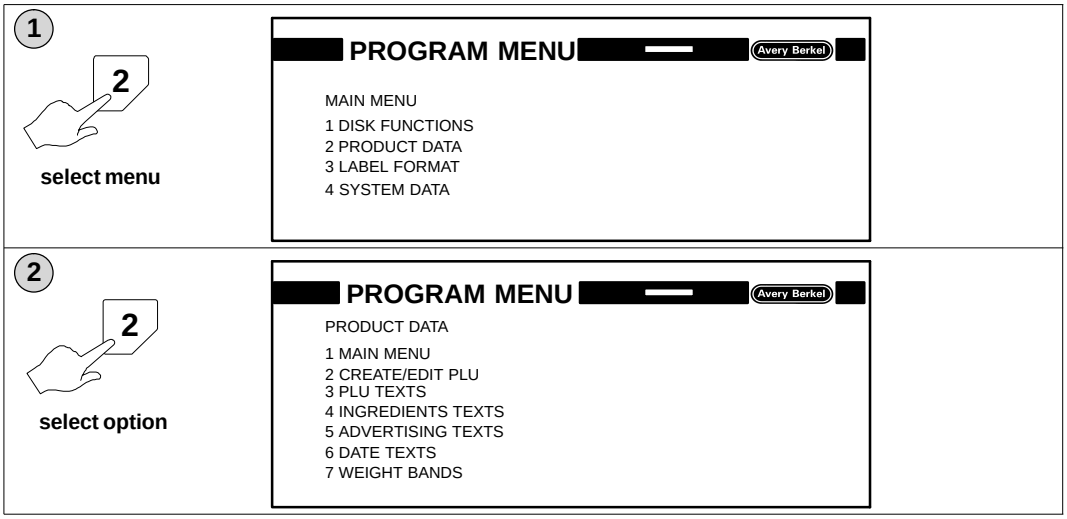


5.2.10 Deleting stored PLU numbers and customer numbers

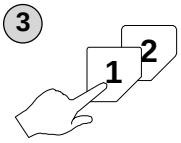
If you delete a PLU number all the related customer numbers and associated data will also be deleted.

Customer numbers may also be deleted independently of PLU numbers.

Deleting PLU number



3

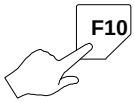


PLU number

CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	
Customer number	7
Labelling mode	0
Unit price	3.50£/kg
Tare	0.015kg
Country code	1

4



to return to start

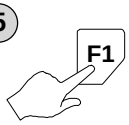
new PLU number?

➧ 6

CREATE/EDIT PLU Avery Berkel

PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredient text 1st line	80% pork, nitrite salt, permitted flavouring
Date text line 1	Use by
Date 1	
Customer number	7
Labelling mode	0
Unit price	3.50£/kg
Tare	0.015kg
Country code	1

5

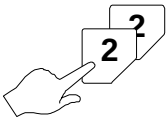


➧ 9

CREATE/EDIT PLU Avery Berkel

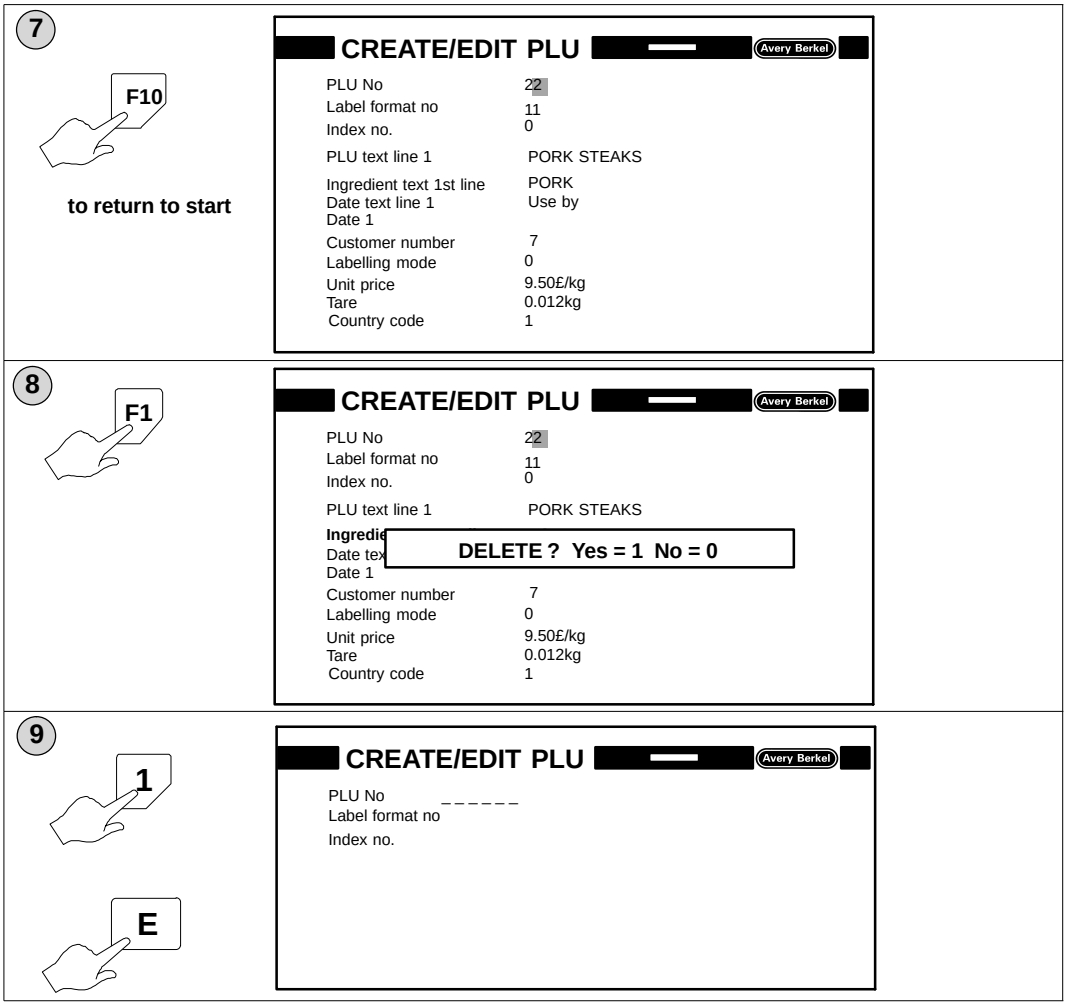
PLU No	12
Label format no	2
Index no.	0
PLU text line 1	PORK SAUSAGE
Ingredie	**DELETE ? Yes = 1 No = 0** uring
Date tex	
Date 1	
Customer number	7
Labelling mode	0
Unit price	3.50£/kg
Tare	0.015kg
Country code	1

6



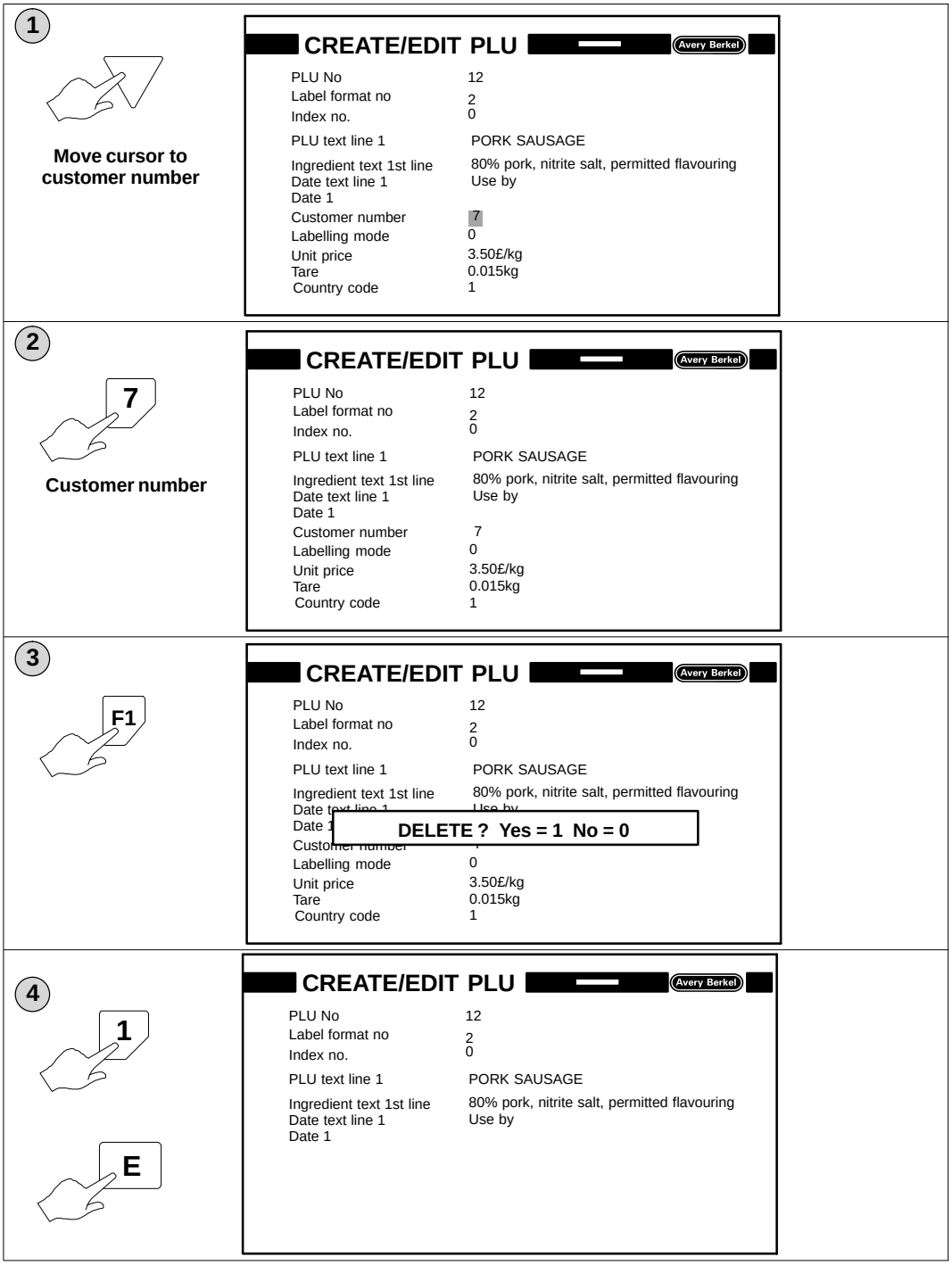
CREATE/EDIT PLU Avery Berkel

PLU No	22
Label format no	11
Index no.	0
PLU text line 1	PORK STEAKS
Ingredient text 1st line	PORK
Date text line 1	Use by
Date 1	
Customer number	7
Labelling mode	0
Unit price	9.50£/kg
Tare	0.012kg
Country code	1


7
F10
to return to start
CREATE/EDIT PLU
Avery Berkel
PLU No 22
Label format no 11
Index no. 0
PLU text line 1 PORK STEAKS
Ingredient text 1st line PORK
Date text line 1 Use by
Date 1
Customer number 7
Labelling mode 0
Unit price 9.50£/kg
Tare 0.012kg
Country code 1
8
F1
CREATE/EDIT PLU
Avery Berkel
PLU No 22
Label format no 11
Index no. 0
PLU text line 1 PORK STEAKS
DELETE ? Yes = 1 No = 0
Customer number 7
Labelling mode 0
Unit price 9.50£/kg
Tare 0.012kg
Country code 1
9
1
E
CREATE/EDIT PLU
Avery Berkel
PLU No
Label format no
Index no.

Deleting customer number

This option is only available if the labelling program has been set for Customer number (function 60_1).



Descriptions

Article number

This is a unique number designated for a specific product and printed as part of the barcode.

Flag number

The flag number depends on the type of barcode to be used. The barcode type and flag number to be used is determined by the country in which the product is to be scanned and sold.

Labelling program

The labelling program is a series of functions which control the way that the B806 operates. The program defines the data that you must enter, the sequence of the entries and the way that the B806 reacts to those entries.

PLU number total

This is the PLU number and associated label format that will be used for printing Total 1 if it is to be different from the PLU and layout currently being used.

Conveyor speed (0 – 2)

You can select one of three speed settings to suit the pack and its contents. Large, awkward packs can be transferred at low speed i.e. 0 but for stable packs with a low profile you can select a higher speed i.e. 2.

Conveyor stop (0 – 3)

You can select the acceleration/deceleration rate to suit the type of packs being transferred. Select the highest rate for unstable packs.

lowest acceleration/deceleration rate –	0
default setting –	1
highest acceleration/deceleration rate –	3

5.3 Label formats (optional)

5.3.1 How label formats work

A label format is a mask with empty fields. You specify the order, size, position, font etc for the fields when you create the label format. You can only use fields that are included in the field definition list selected for the label format. The print data (content of the fields), except for fixed texts, can be entered in the PLU Create/Edit program.

Each label format is stored under a name consisting of a format number and an index number.

Copying label formats

You may copy a label format that has an index number 0 and then edit the copy if required. You can select different fields providing they exist in the Field Definition List. You may change the label size, and move, delete or change the size of a field.

Deleting label formats

Press F1 after you have entered the label format name (number and index) to delete the label format.

5.3.2 Access to label format option

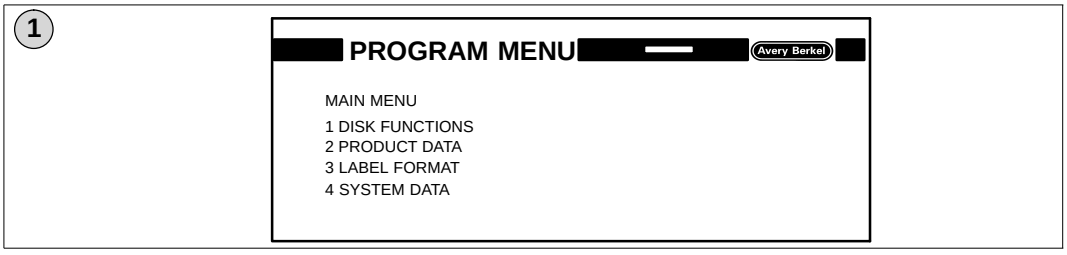
There are two routes available to the label formats option:

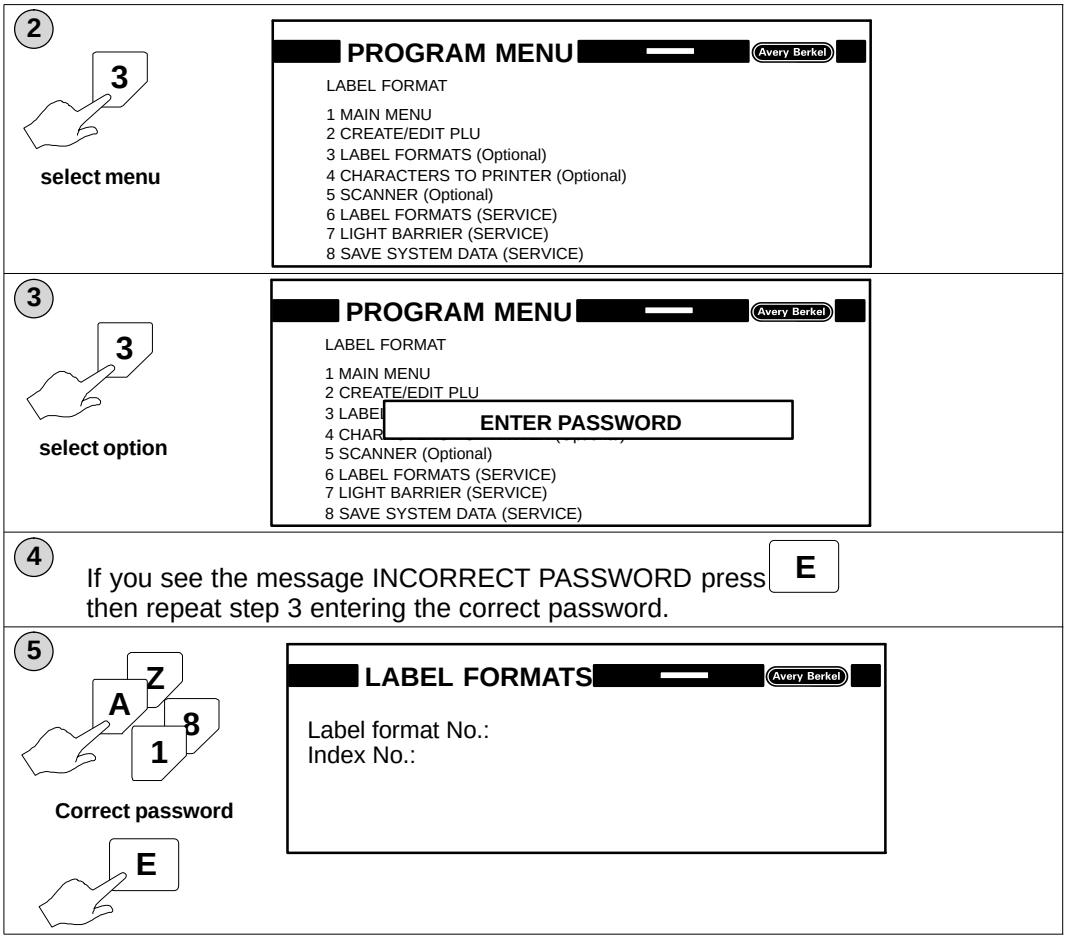
- Operator menus
  In the Operator Menus select the Label Format option, if available. You may require a password to be able to use the option.
- Service password route

Operator menu route

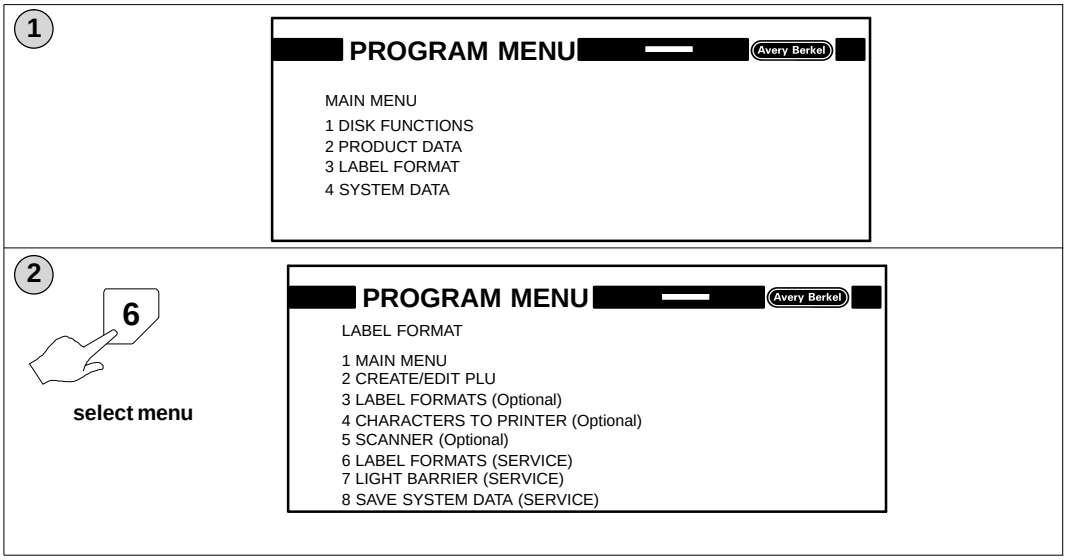
If you see the message INCORRECT PASSWORD and you do not know the password you can press E several times to clear the message.

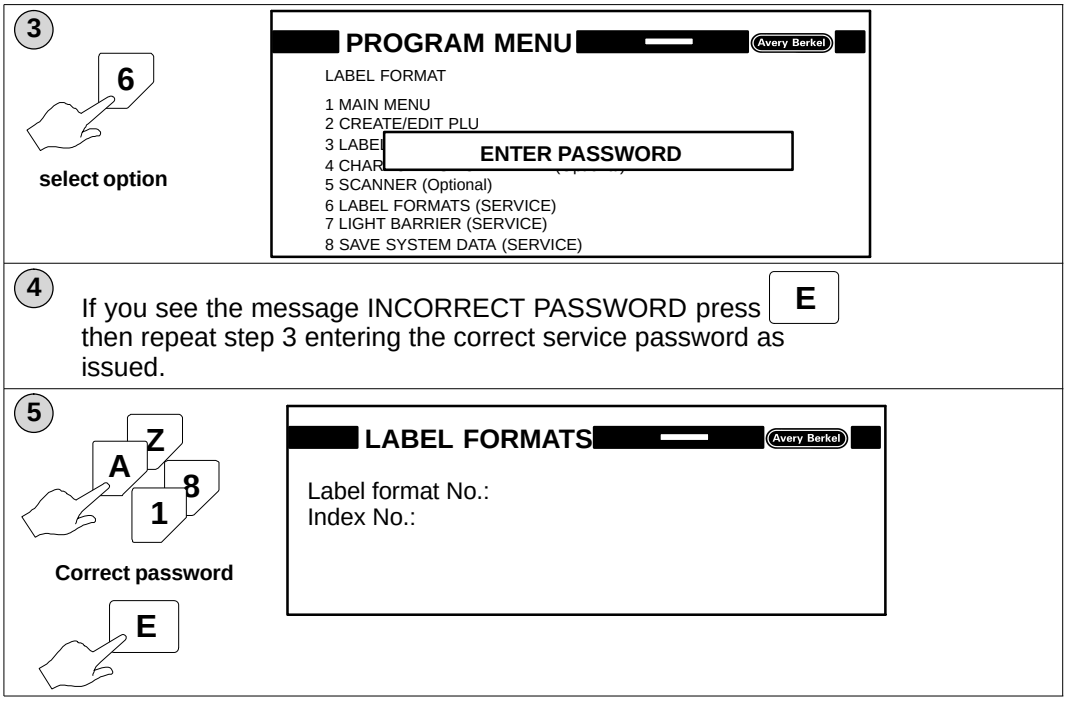
Press F to return to Main Menu.





Service password route



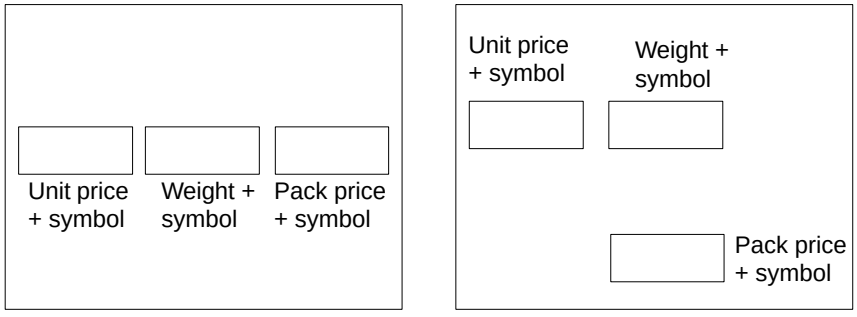


5.3.3 Legal requirements

You must ensure that any label formats that you design for use in transactions subject to Weights and Measures regulations comply with the following legal requirements.

Field order

Fields for unit price, weight, pack price and the corresponding symbols must be provided in the label format and appear in the correct order. They must be positioned so that they are seen to belong together.



Currency and weight symbols

These symbols will be determined by the country code selected and will be printed automatically providing the fields are in the label format. You must use the following fonts:

Unit price symbol	font 98
Weight symbol	font 98
Pack price symbol	font 99

Font sizes

Unit price, weight and pack price

Minimum character height	4mm
Recommended fonts	
Unit price	font 3
Weight	font 3
Pack price	font 4

Other

Minimum character height	
Texts	2mm minimum
Fixed weights up to 1kg	4mm minimum
Fixed weights over 1kg	6mm minimum

Avoir or metric

You may not use the same label formats for imperial pounds and metric weight types. You must use different weight fields and weight symbol fields for each. You can use the same label formats for decimal pounds and metric weight types.

Amount fields

If the label format includes the fields, the relevant data will automatically be printed in the field.

Print position

Press F2 followed by 2 to position the amount text at the right hand side of the field.

Number		Field name	No. of characters		
8	0	Unit price	6	↘	
11	0	Net weight	6	→	Individual pack
21	0	Pack price	6	↗	
70	0	Number of packs	5	↘	
71	0	Weight total	8	→	Total 1
72	0	Total 1 price	8	↗	
73	0	Number of totals 1	5	↘	
74	0	Weight total	8	→	Total 2
75	0	Total 2 price	8	↗	
76	0	Number of packs	5	↘	
77	0	Weight total	8	→	Total 3
78	0	Total 3 price	8	↗	

Number		Field name	No. of characters
24	0	Unit price symbol	1
22	0	Weight symbol	1
23	0	Price symbol	1

5.3.4 Designing label formats

Label sizes

Maximum width 88mm

Maximum height 100mm

Scale

The label image on the screen will be displayed full size for label format sizes up to 78mm x 80mm. For label heights greater than 80mm a smaller scale will be used.

Field selection lists

There are four default Field Selection Lists available for you to use or you may create your own list using any of the field definitions listed in the Field Definition Lists. You can see a complete list of Field Definitions in Section 7.2.7.

Any Field Selection Lists you create must be compatible with the MX400 Data Management application software, if used.

You may request any line from the Field Selection List for inclusion in the label format. The fields defined in the format will be automatically identified by the name (format number and index number).

A black highlight bar indicates which field has been selected. When the highlight bar is at the lowest line on the screen each time you press ▽ scrolls the definition list upward by one line.

Key functions for field selection

△	Move black highlight bar upwards	▽	Move black highlight bar downwards
Caps △	Move black highlight bar upwards in 5 line blocks	Caps ▽	Move black highlight bar downwards in 5 line blocks
F10	Return to start of label format		

Key functions for editing displayed fields

◀ ▶	Move to next parameter			
F2		Position of text in field	F4	Font type
	0	left	0	normal
	1	middle	1	inverse (negative – white on black background)
	2	right		
F6		Increases character width 1 to 9 times Increases character height 1 to 9 times		
F7	0	Field identification Default	always printed if data present	
	1	Only printed for total 1 label		
	2	Only printed for total 2 label		
	3	Only printed for total 3 label		
	4	Only printed for total 4 label		
	5	Only printed for single label		
F8		Switch on text input. (Empty format according to field length will be displayed.) The text will be printed on **every** label for **all** the PLUs using that label format.		
F1		Delete		
F3		Save		

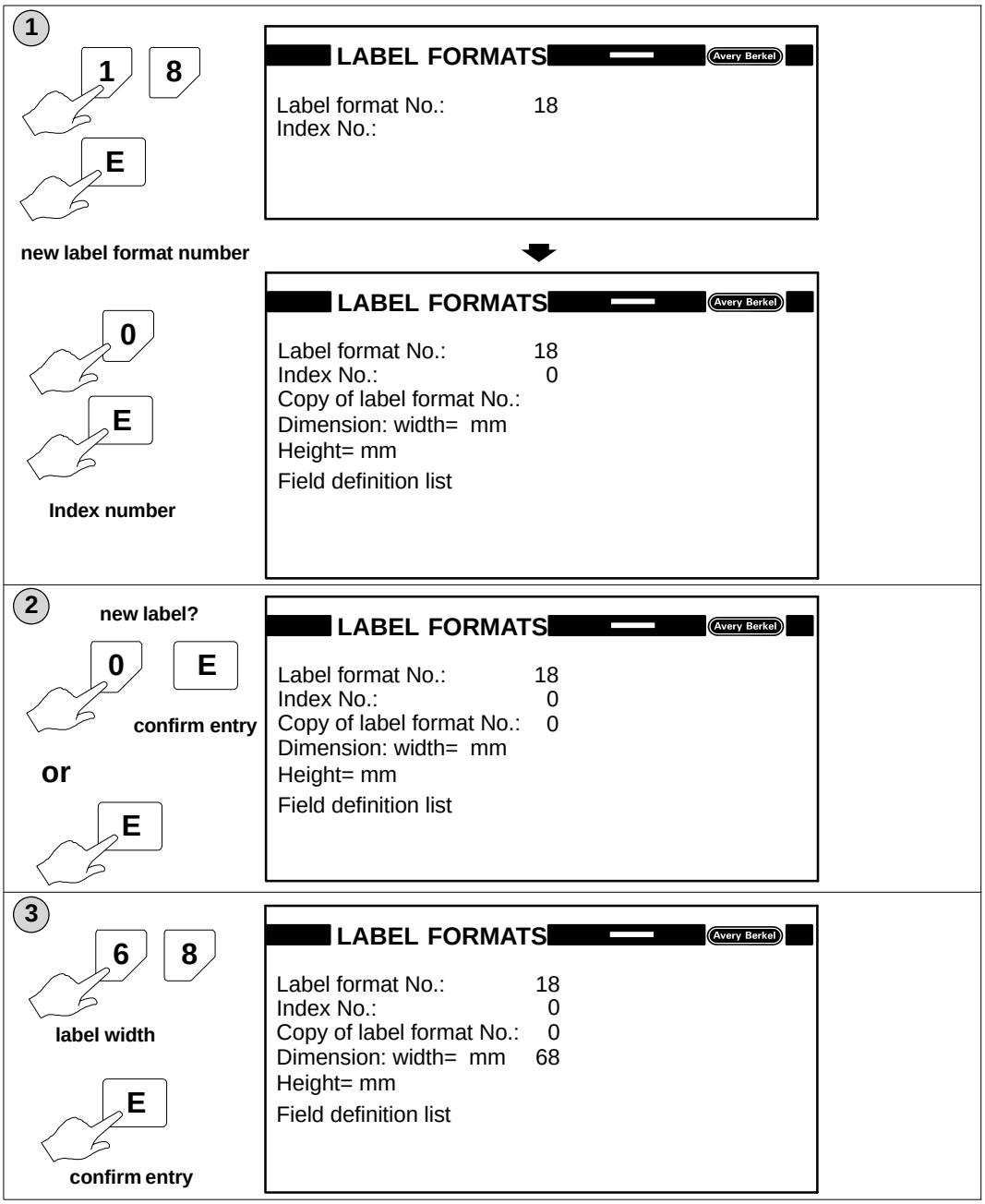
⚠ Do not use F2 , F4 , or F6 for barcode fields.

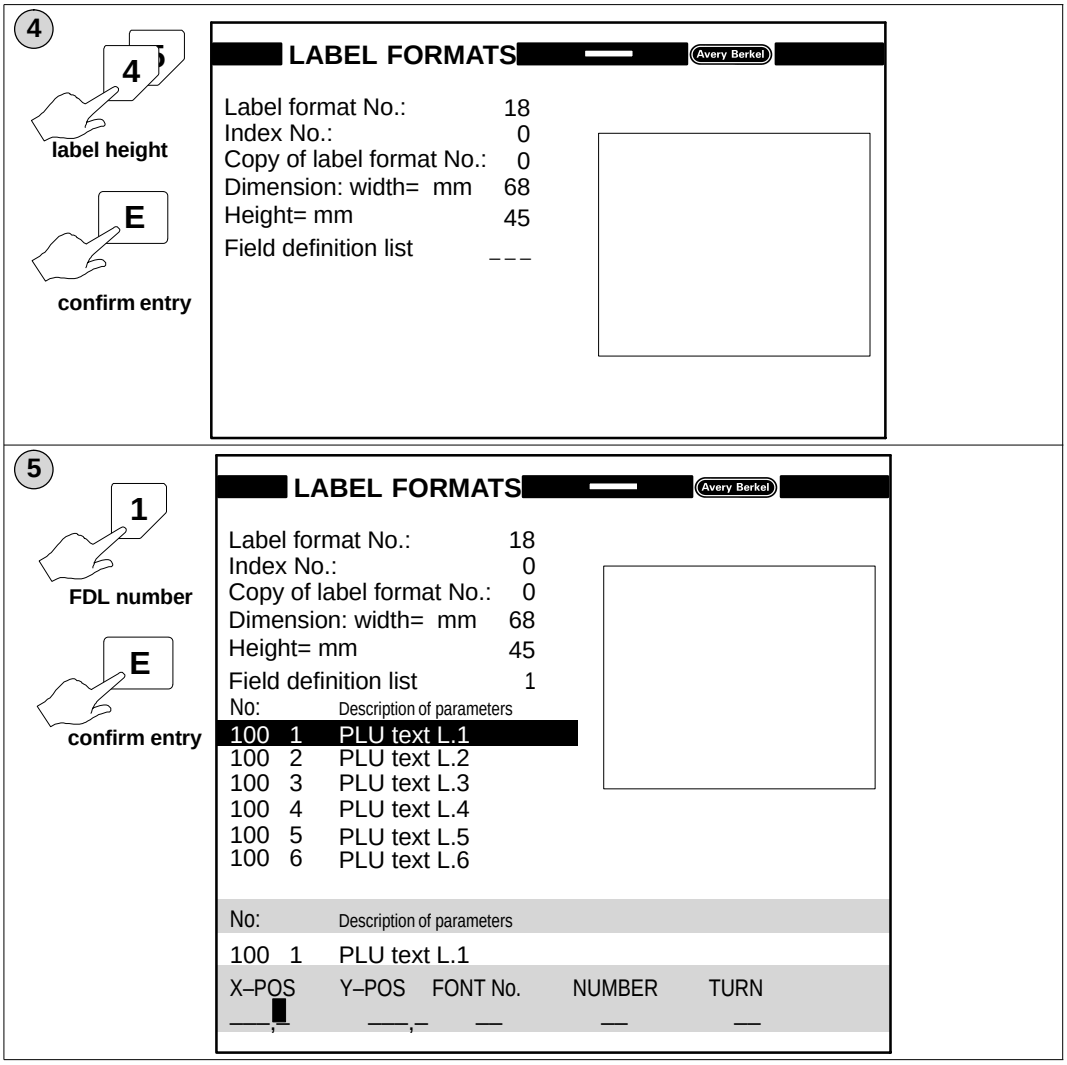
5.3.5 Creating a new label format

Press F3 at any time to save the label format.

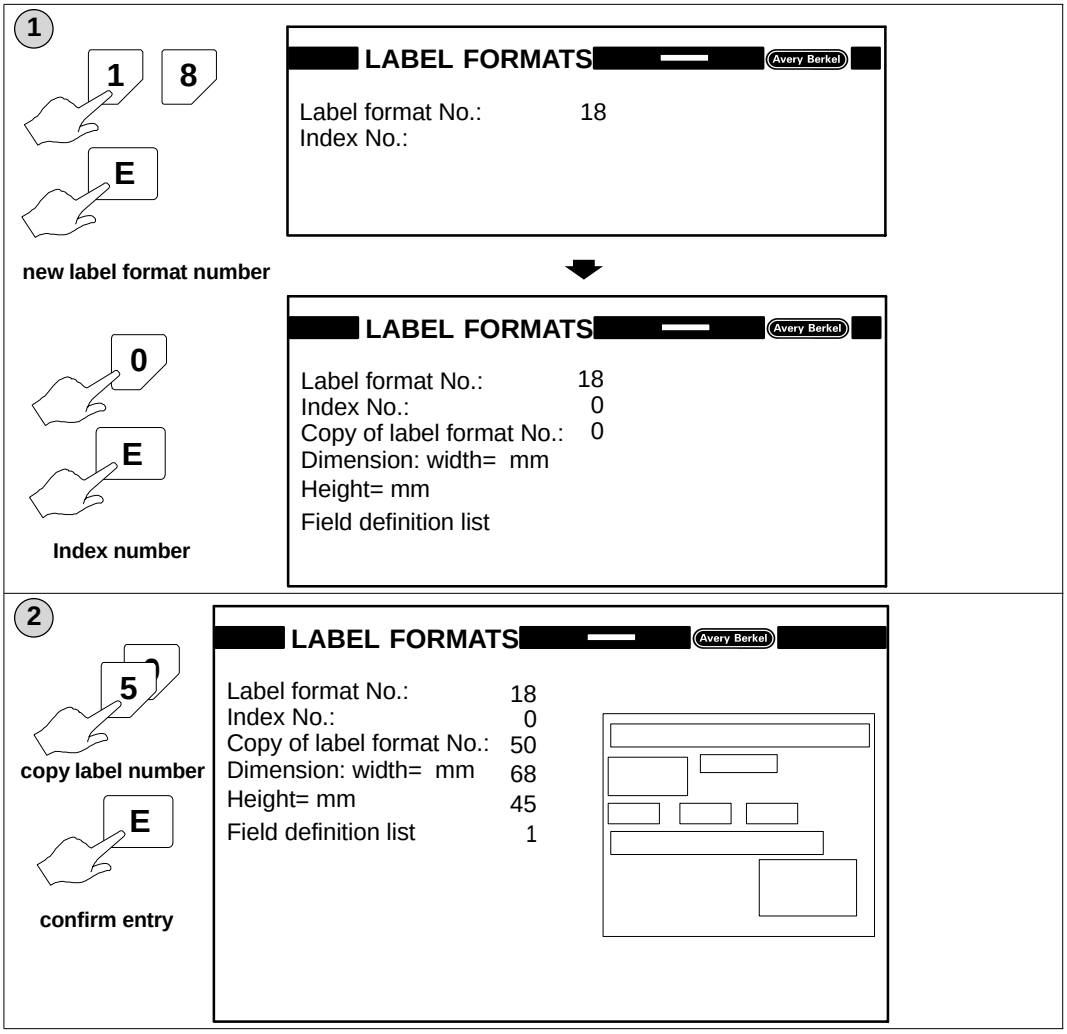
You can use any number from 1 to 255 to identify the label format. If you want to be able to copy the format you must enter 0 for the index number.

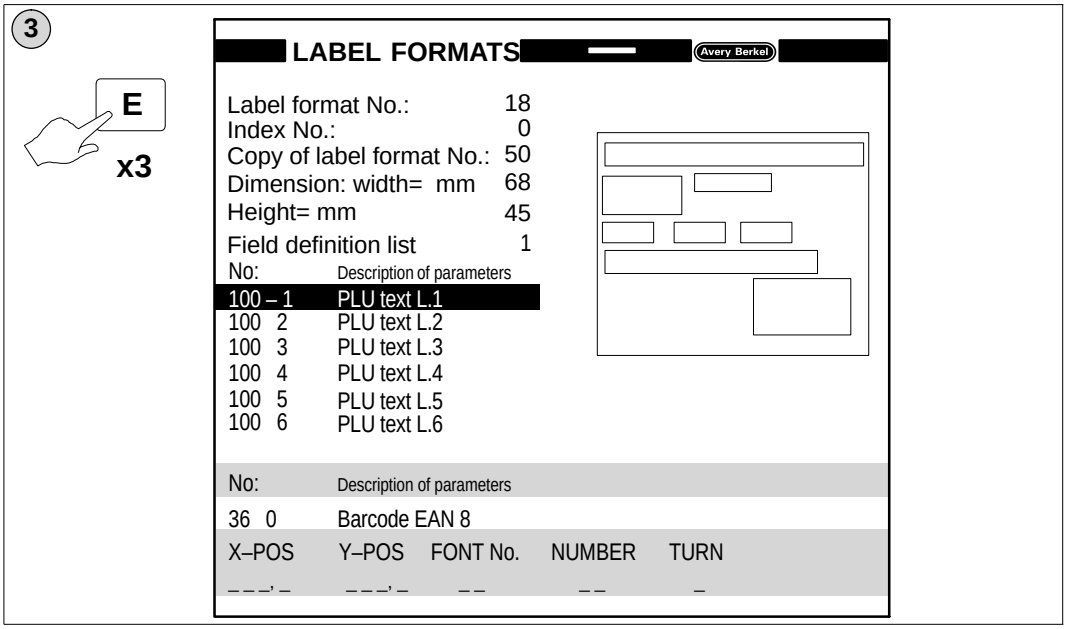
If you enter a number that has already been used, the data stored for that label format will be displayed on the screen. Press Shift to return to the start and enter a new number.




4
4
label height
E
confirm entry
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list ___
5
1
FDL number
E
confirm entry
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1
No: Description of parameters
100 1 PLU text L.1
100 2 PLU text L.2
100 3 PLU text L.3
100 4 PLU text L.4
100 5 PLU text L.5
100 6 PLU text L.6
No: Description of parameters
100 1 PLU text L.1
X–POS Y–POS FONT No. NUMBER TURN

5.3.6 Copying label formats





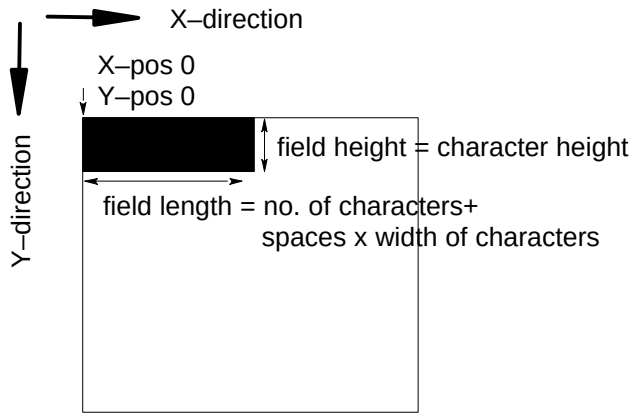
5.3.7 Defining the fields

Enter the values for the size and position of the field in the position indicated by the flashing cursor at the bottom of the display. When you confirm the last value entered (TURN) the field outline will be displayed.

The system program will not accept values which cause a field to overlap the label outline.

Press F3 to save each field as it is created in case you subsequently make a mistake.

Text fields

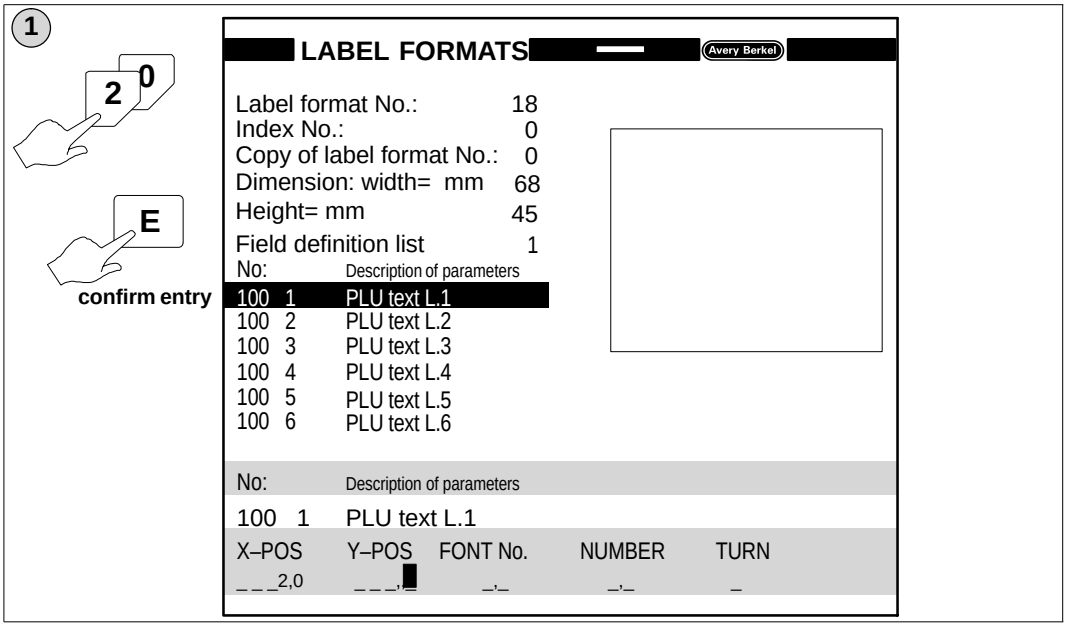


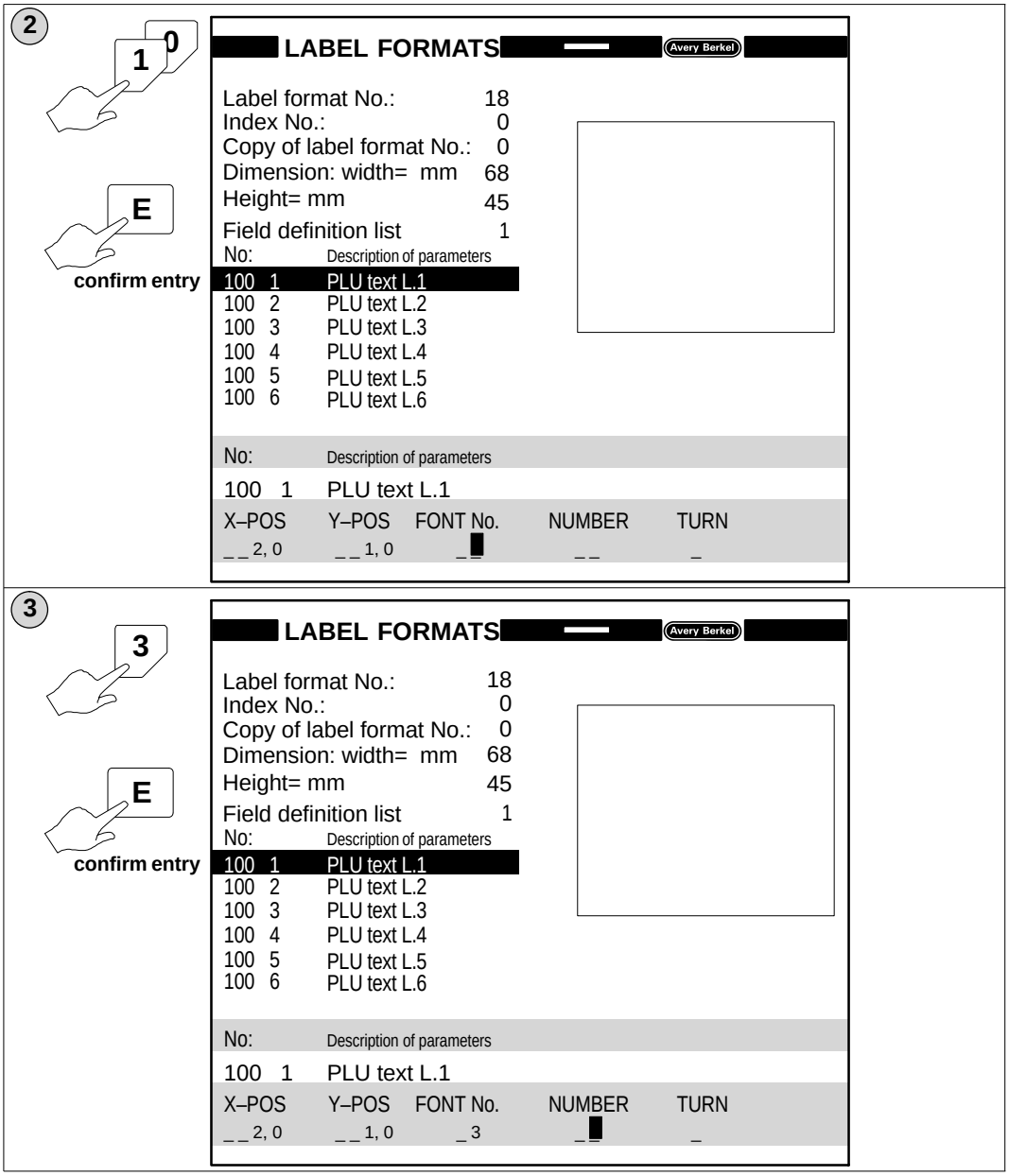
To increase field length you must increase the character width or the number of characters.

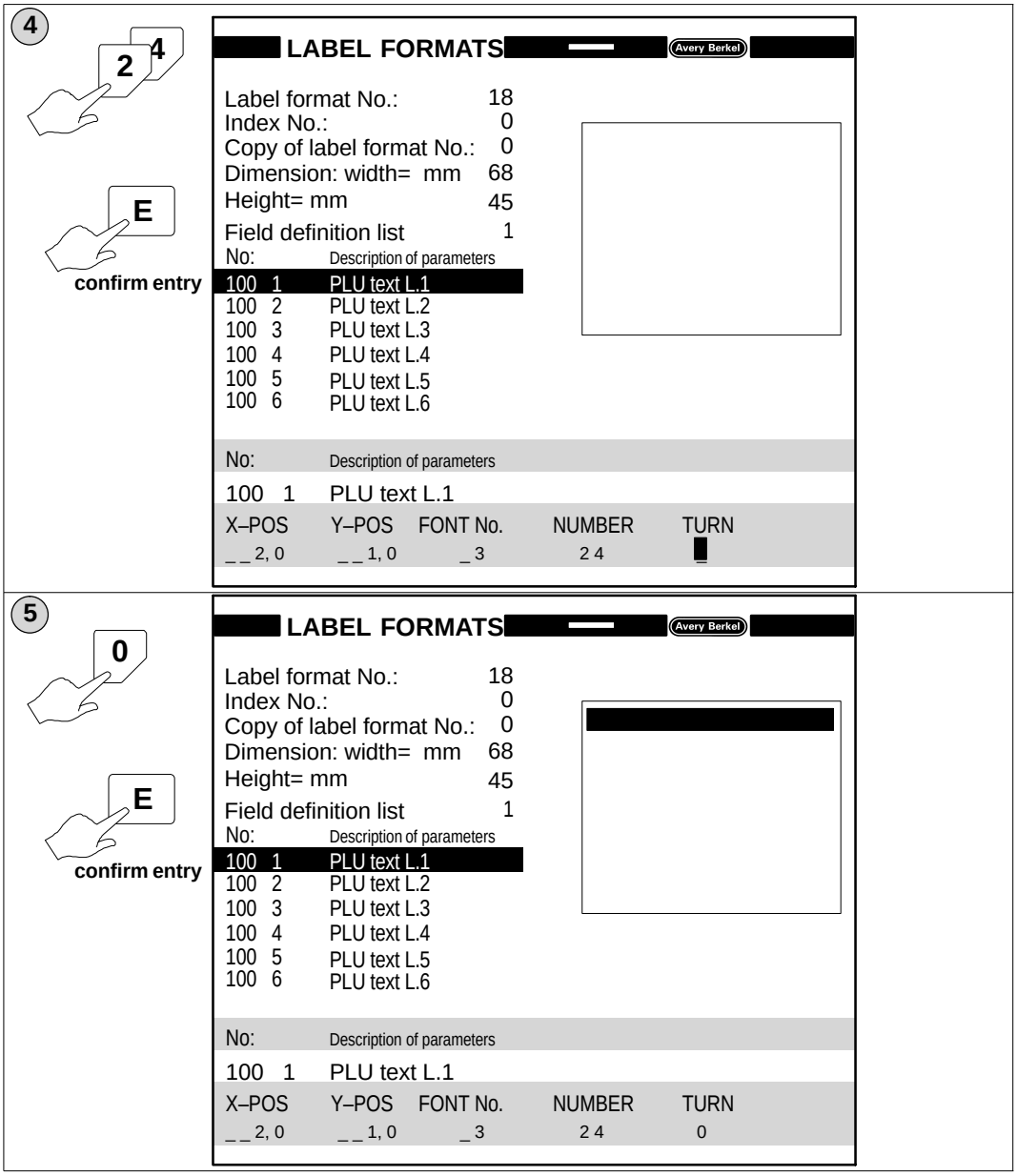
Press F6 then enter the magnification value required to increase the character width and height. (You can enter a value from 1 to 9.)

If you use an magnification factor you will reduce the number of characters that will fit into the field.

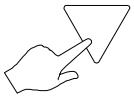
X–pos	position of upper, left corner of field in 1/10mm
Y–pos	position of upper, left corner of field in 1/10mm
Font number	1 to 5 and additional special fonts 1 = 1.0mm x 1.1mm 2 = 3.4mm x 2.2mm 3 = 4.8mm x 2.2mm 4 = 4.8mm x 3.3mm 5 = 2.0mm x 1.1mm
Number	maximum number of characters in field
Turn	0 = 0 degrees 1 = 90 degrees 2 = 180 degrees 3 = 270 degrees

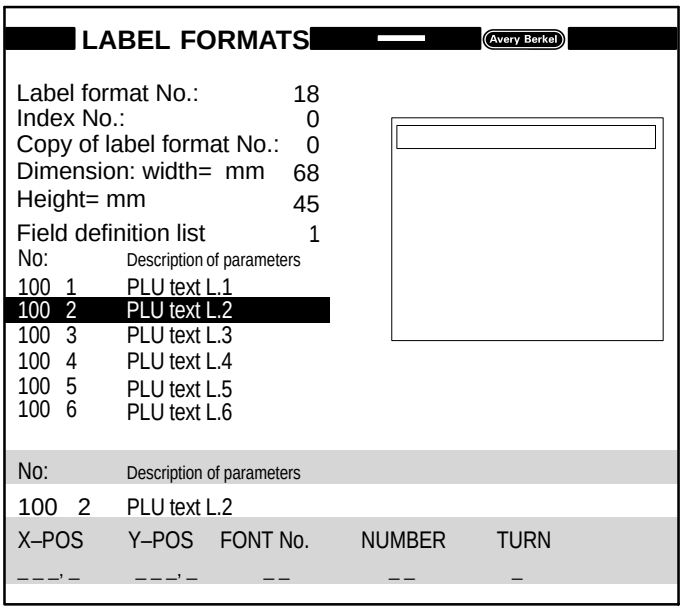



2
1
0
E
confirm entry
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1
No: Description of parameters
100 1 PLU text L.1
100 2 PLU text L.2
100 3 PLU text L.3
100 4 PLU text L.4
100 5 PLU text L.5
100 6 PLU text L.6
No: Description of parameters
100 1 PLU text L.1
X–POS Y–POS FONT No. NUMBER TURN
_ _ 2, 0 _ _ 1, 0 _ _ _ _
3
3
E
confirm entry
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1
No: Description of parameters
100 1 PLU text L.1
100 2 PLU text L.2
100 3 PLU text L.3
100 4 PLU text L.4
100 5 PLU text L.5
100 6 PLU text L.6
No: Description of parameters
100 1 PLU text L.1
X–POS Y–POS FONT No. NUMBER TURN
_ _ 2, 0 _ _ 1, 0 _ 3 _ _ _


4
2
4
E
confirm entry
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1
No: Description of parameters
100 1 PLU text L.1
100 2 PLU text L.2
100 3 PLU text L.3
100 4 PLU text L.4
100 5 PLU text L.5
100 6 PLU text L.6
No: Description of parameters
100 1 PLU text L.1
X–POS Y–POS FONT No. NUMBER TURN
_ _ 2, 0 _ _ 1, 0 _ 3 2 4
5
0
E
confirm entry
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1
No: Description of parameters
100 1 PLU text L.1
100 2 PLU text L.2
100 3 PLU text L.3
100 4 PLU text L.4
100 5 PLU text L.5
100 6 PLU text L.6
No: Description of parameters
100 1 PLU text L.1
X–POS Y–POS FONT No. NUMBER TURN
_ _ 2, 0 _ _ 1, 0 _ 3 2 4 0

6





7 Repeat steps 1 to 6 until you have created all the label fields that you require.

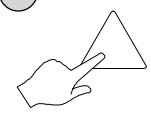
NOTE: *100 1 PLU text L.1*
100 2 PLU text L.2

These text lines are:

- *displayed when a valid PLU is entered by the operator.*
- *used as reference text by the PLU Text Search function.*

If you want to use these text lines for the full product description but inhibit printing on individual labels, see Field Identification, page 5–52.

8



LABEL FORMATS Avery Berkel

Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1

No:		Description of parameters
100	1	PLU text L.1
100	2	PLU text L.2
100	3	PLU text L.3
100	4	PLU text L.4
100	5	PLU text L.5
100	6	PLU text L.6

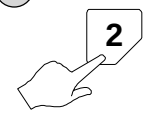
No:		Description of parameters
100	1	PLU text L.1

X–POS	Y–POS	FONT No.	NUMBER	TURN
_ _ 2, 0	_ _ 1, 0	_ 3	2 4	0

9

x3

10



change number of characters to 2

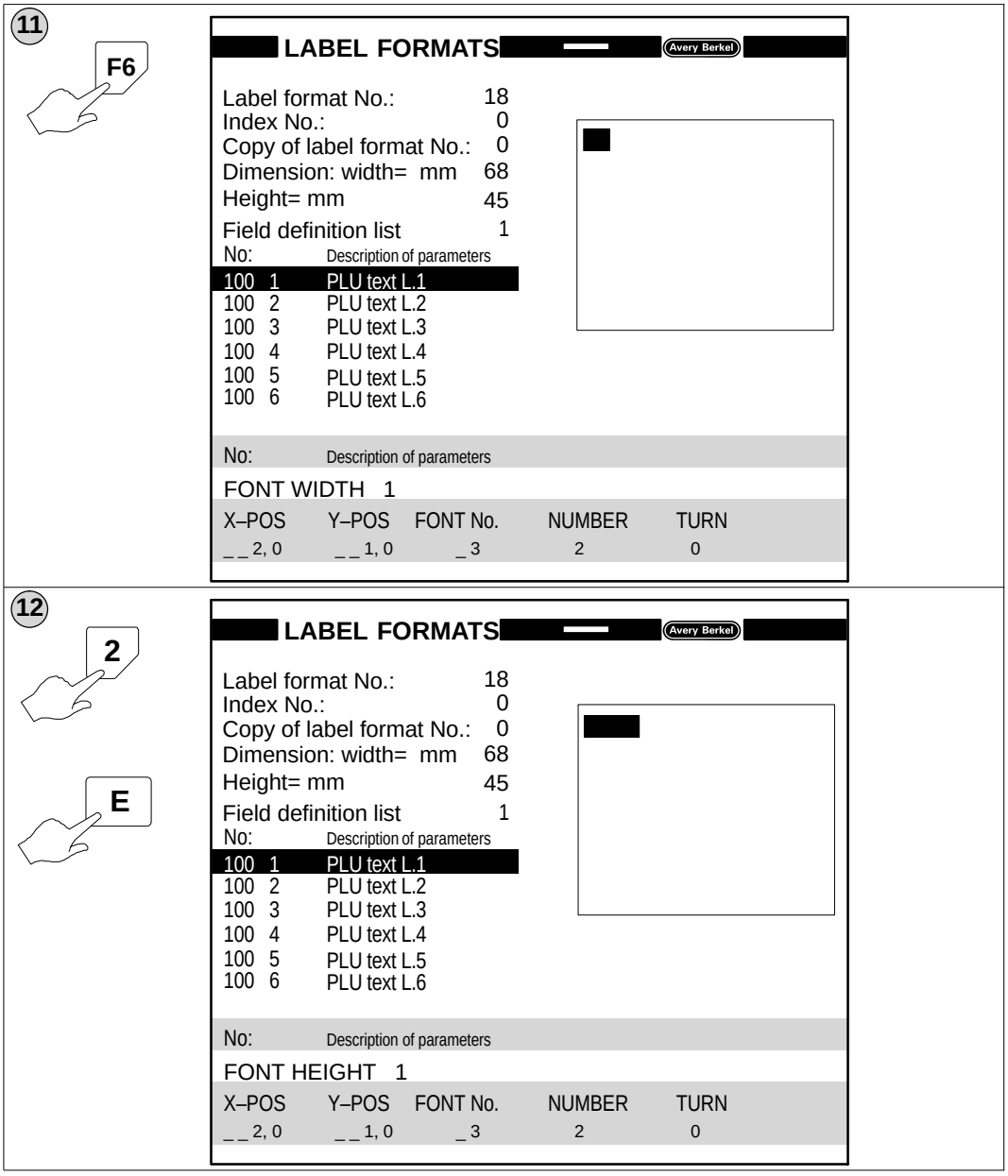
LABEL FORMATS Avery Berkel

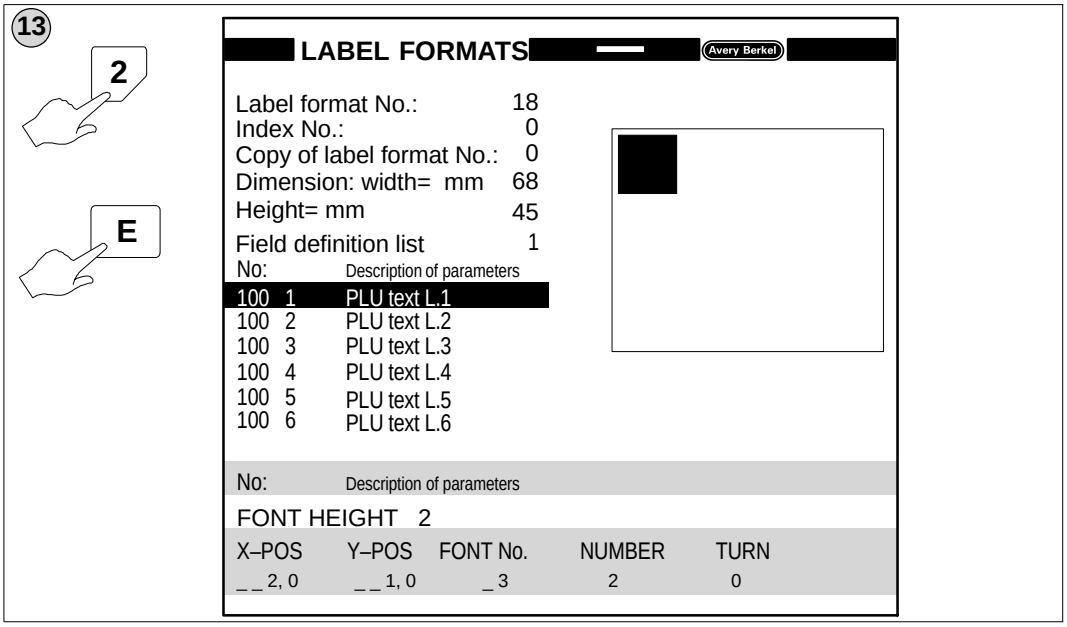
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1

No:		Description of parameters
100	1	PLU text L.1
100	2	PLU text L.2
100	3	PLU text L.3
100	4	PLU text L.4
100	5	PLU text L.5
100	6	PLU text L.6

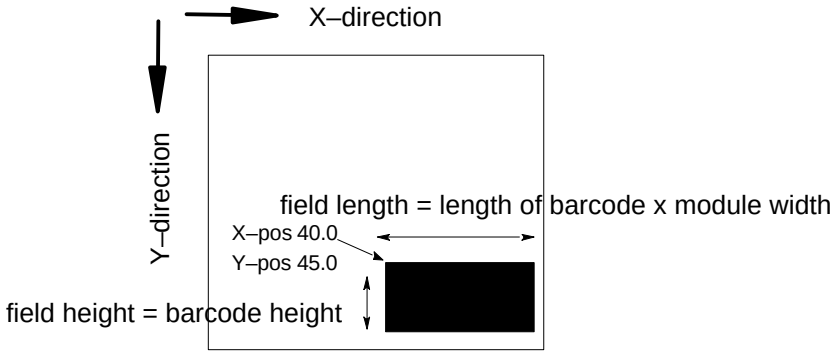
No:		Description of parameters
100	1	PLU text L.1

X–POS	Y–POS	FONT No.	NUMBER	TURN
_ _ 2, 0	_ _ 1, 0	_ 3		0


11
F6
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1
No: Description of parameters
100 1 PLU text L.1
100 2 PLU text L.2
100 3 PLU text L.3
100 4 PLU text L.4
100 5 PLU text L.5
100 6 PLU text L.6
No: Description of parameters
FONT WIDTH 1
X–POS Y–POS FONT No. NUMBER TURN
_ _ 2, 0 _ _ 1, 0 _ 3 2 0
12
2
E
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1
No: Description of parameters
100 1 PLU text L.1
100 2 PLU text L.2
100 3 PLU text L.3
100 4 PLU text L.4
100 5 PLU text L.5
100 6 PLU text L.6
No: Description of parameters
FONT HEIGHT 1
X–POS Y–POS FONT No. NUMBER TURN
_ _ 2, 0 _ _ 1, 0 _ 3 2 0



Barcode fields

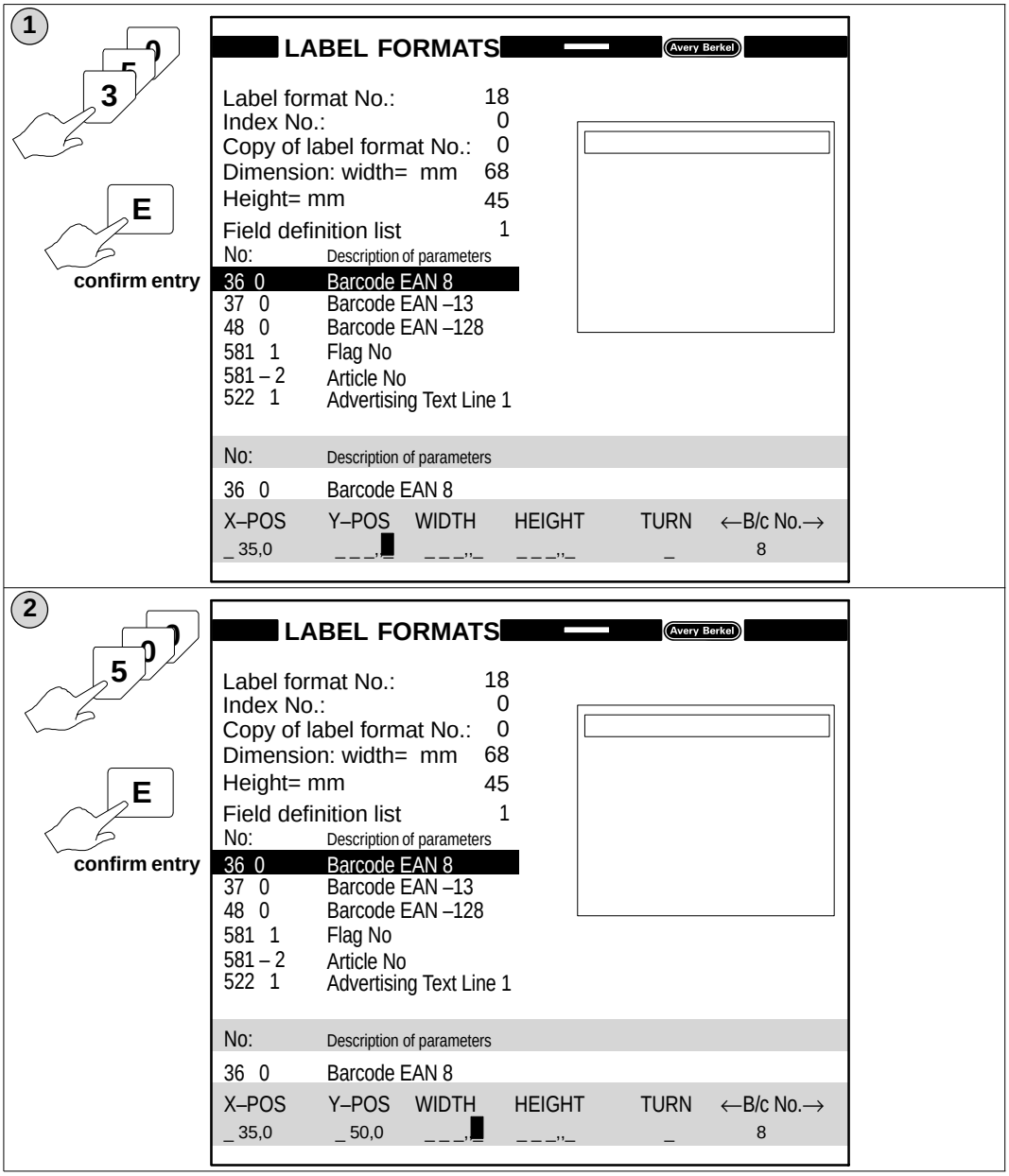


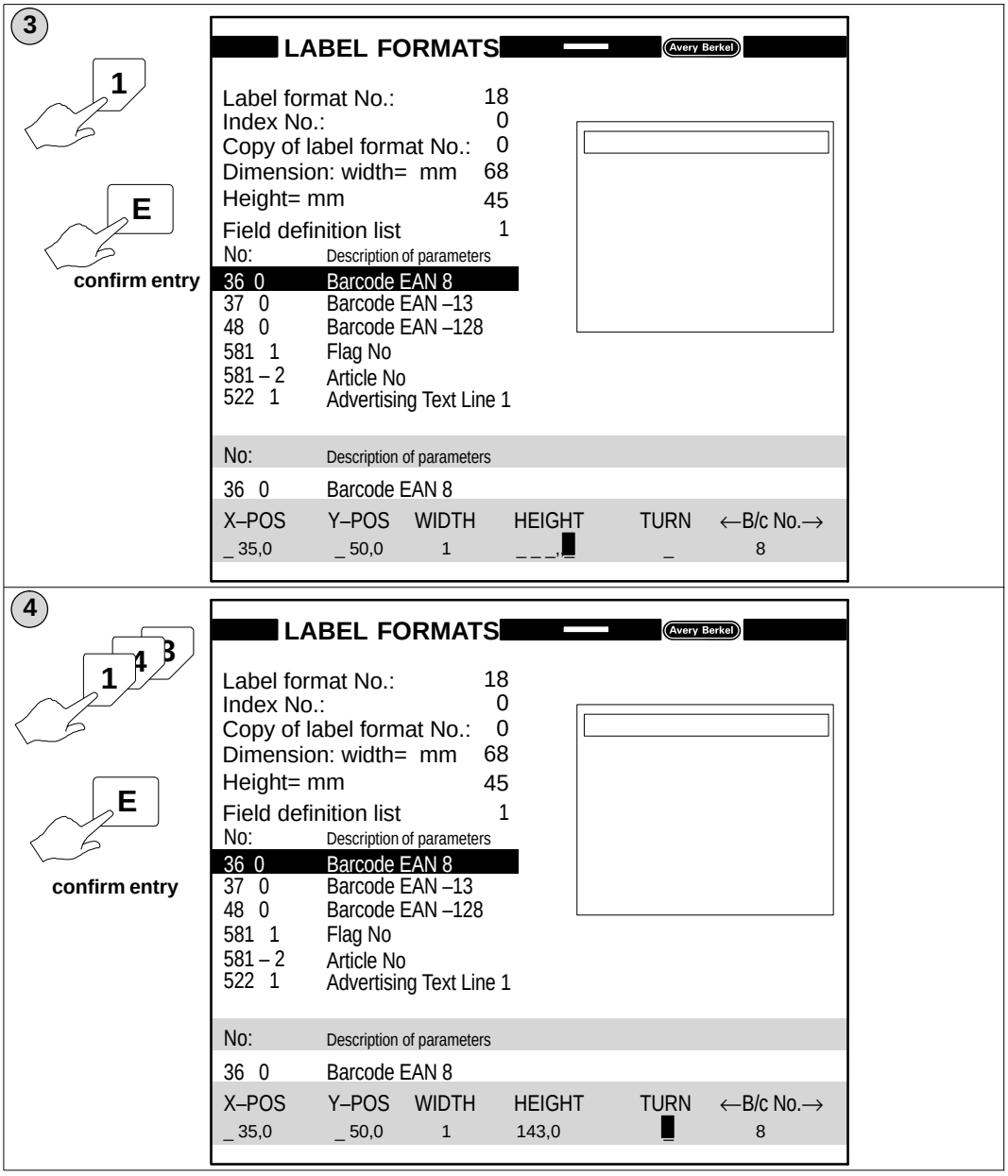
Example: Barcode field at position X40.0, Y45.0

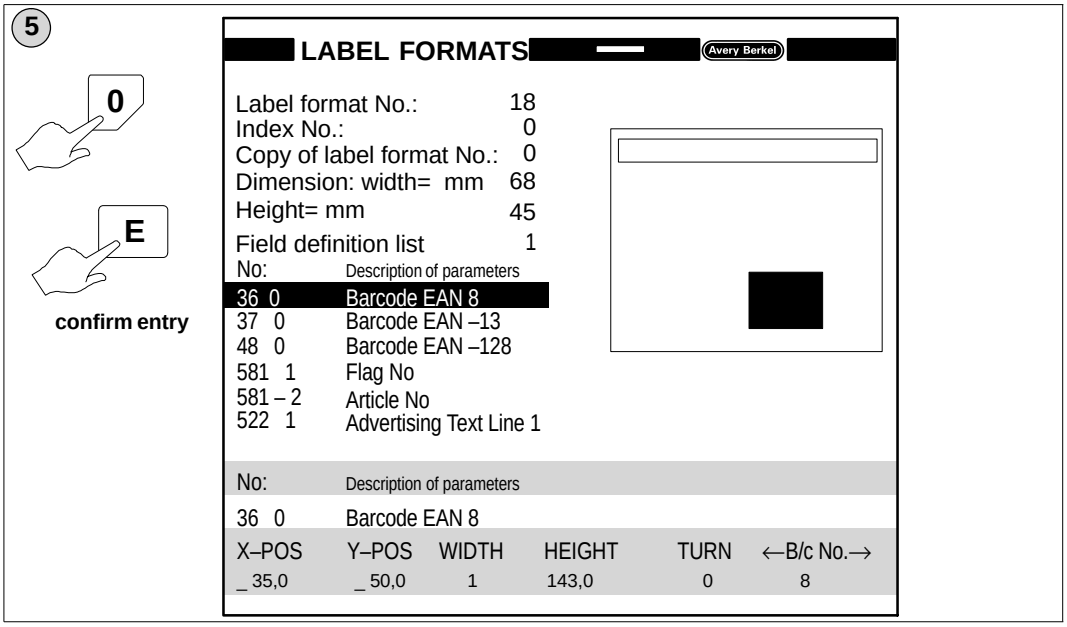
X–pos	position of upper, left corner of field in 1/10mm increments
Y–pos	position of upper, left corner of field in 1/10mm increments
Width	1 = module width 0.27mm 2 = module width 0.54mm
Height	Barcode height including barcode numbers in 1/10mm increments
Turn	0 = 0 degrees 2 = 180 degrees (1 and 3 not allowed)
Digits	maximum number of characters in field

For barcodes EAN8 and EAN13 the number of digits is fixed. Enter the number of digits required for other barcodes.

Do not use F2 , F4 , or F6 for barcode fields.


1
3
E
confirm entry
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1
No: Description of parameters
36 0 Barcode EAN 8
37 0 Barcode EAN –13
48 0 Barcode EAN –128
581 1 Flag No
581 – 2 Article No
522 1 Advertising Text Line 1
No: Description of parameters
36 0 Barcode EAN 8
X–POS Y–POS WIDTH HEIGHT TURN ←B/c No.→
_ 35,0 _ _ _,_ _ _ _,,_ _ _ _,,_ _ 8
2
5
E
confirm entry
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1
No: Description of parameters
36 0 Barcode EAN 8
37 0 Barcode EAN –13
48 0 Barcode EAN –128
581 1 Flag No
581 – 2 Article No
522 1 Advertising Text Line 1
No: Description of parameters
36 0 Barcode EAN 8
X–POS Y–POS WIDTH HEIGHT TURN ←B/c No.→
_ 35,0 _ 50,0 _ _ _,_ _ _ _,,_ _ 8


3
1
E
confirm entry
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1
No: Description of parameters
36 0 Barcode EAN 8
37 0 Barcode EAN –13
48 0 Barcode EAN –128
581 1 Flag No
581 – 2 Article No
522 1 Advertising Text Line 1
No: Description of parameters
36 0 Barcode EAN 8
X–POS Y–POS WIDTH HEIGHT TURN ←B/c No.→
_ 35,0 _ 50,0 1 _ _ _ _ 8
4
1 4 3
E
confirm entry
LABEL FORMATS
Avery Berkel
Label format No.: 18
Index No.: 0
Copy of label format No.: 0
Dimension: width= mm 68
Height= mm 45
Field definition list 1
No: Description of parameters
36 0 Barcode EAN 8
37 0 Barcode EAN –13
48 0 Barcode EAN –128
581 1 Flag No
581 – 2 Article No
522 1 Advertising Text Line 1
No: Description of parameters
36 0 Barcode EAN 8
X–POS Y–POS WIDTH HEIGHT TURN ←B/c No.→
_ 35,0 _ 50,0 1 143,0 _ 8

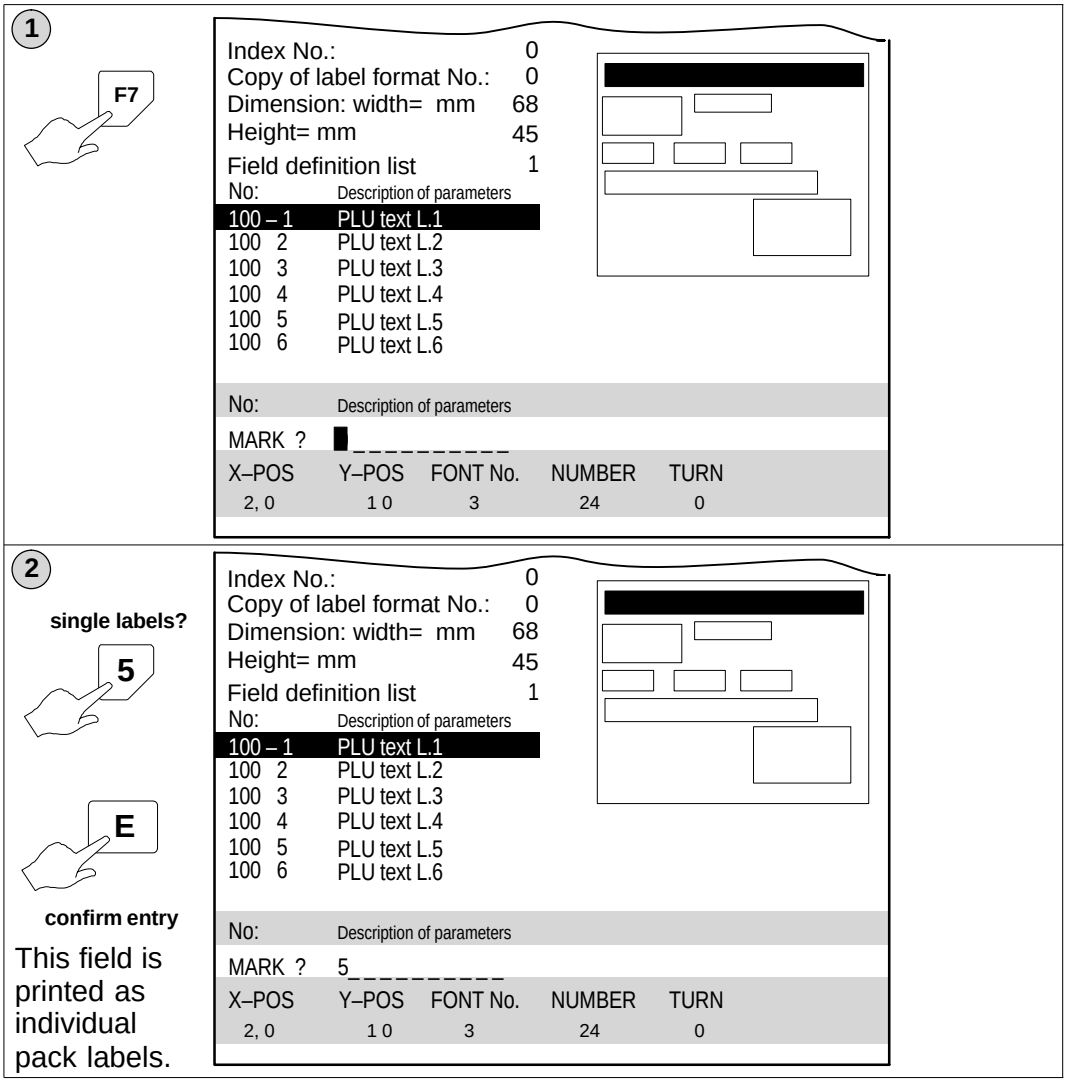


Field identification (F7)

You can assign an identification code to a field which will determine when that field will be printed. The default setting for all fields is 0 (always print if data is present).

Press F7 followed by the appropriate code number.

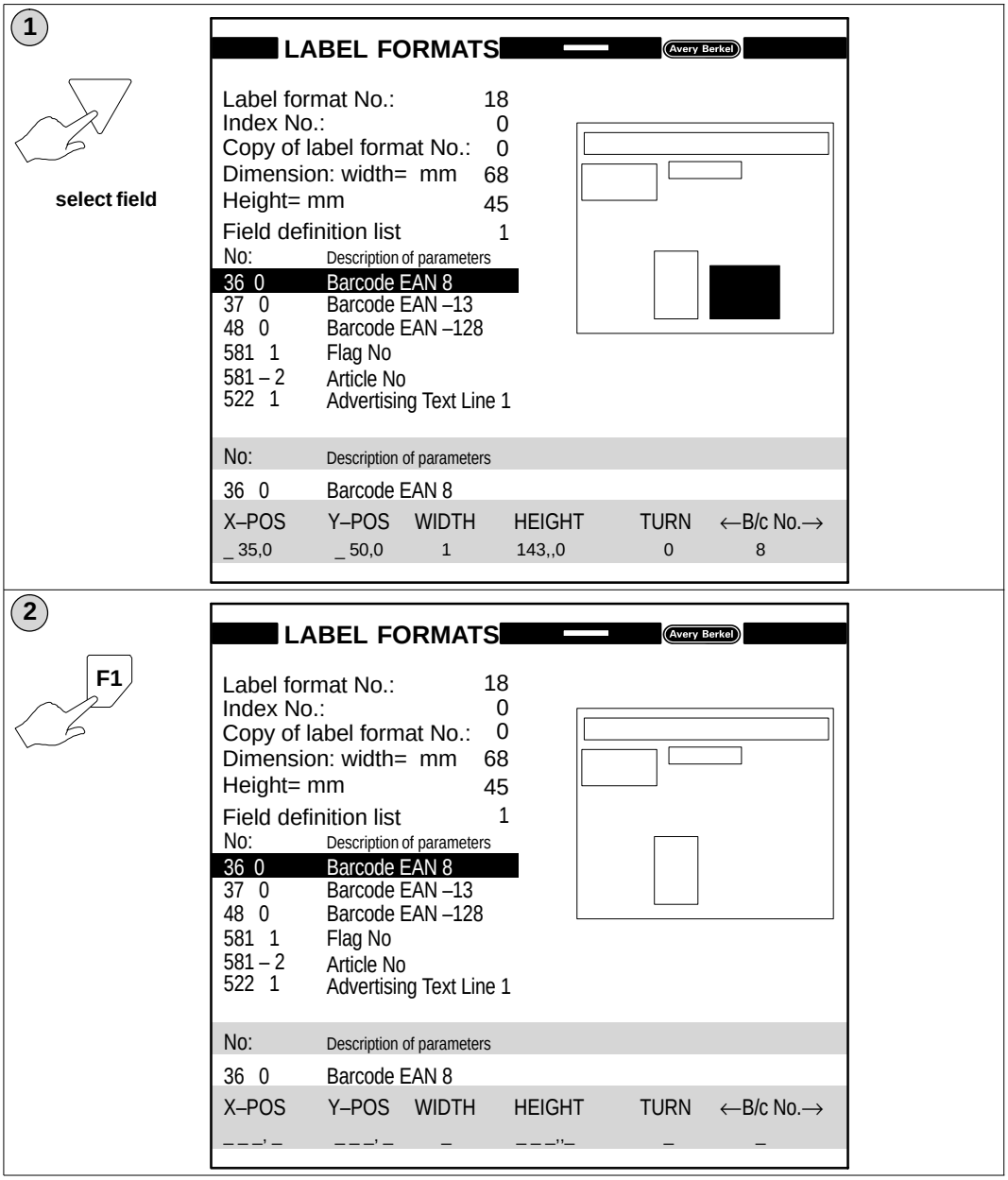
F7 0	Field identification Default	always printed if data present
1	Only printed for total 1 label	
2	Only printed for total 2 label	
3	Only printed for total 3 label	
4	Only printed for total 4 label	
5	Only printed for single label	



5.3.8 Deleting fields

To delete a field from the label format you must select the appropriate line in the field definition list and then press F1 . The field will be deleted from the screen and relevant text or data will **not** be printed on the label. The field will not be removed from the field definition list.

You will see any changes you make displayed on screen but you must press F3 to save the changes you have made to the label format.



5.3.9 Label formats for totals labels

The system program always contains all the data for printing single labels and totals labels. The label format assigned to the PLU determines exactly which fields are printed. Data will only be printed if the relevant field exists in the label format.

Defining the formats

You may define, if you wish, different label formats for totals labels containing only the totals fields required. You must create a separate PLU for each different label format.

The PLU number for the total label must be entered in the main PLU when it is being created.

Field identification

As an alternative you can define a label format containing all the fields you require. You then mark each field with a field identification code which determines when the field will be printed.

The system program automatically recognises which fields are to be ignored and which will have data before each single or totals label is printed. See page 5–52 for how to assign an identification code to a field.

Fields that are to appear only on the totals labels may be located at the same coordinates as fields for the single label provided that they are created at that position and not moved to it subsequently. The machine system will not allow you to move a field to a position on top of or overlapping another field.

5.4 Key functions

△	Move black highlight bar upwards	▽	Move black highlight bar downwards
Caps + △ Shift	Move black highlight bar upwards one screen	Caps + ▽ Shift	Move black highlight bar downwards one screen

◁ ▷	Move to next parameter Move between standard and selection lists Move cursor		
F1	Delete/Clear		
F3	Save		
F2 0 1 2	Position of text in field left middle right	F4 0 1	Font type normal inverse
F5	Insert a line		
F6	Insert a character when text editing or increase character height/width 1 to 9 times during label formatting.		
F7	Field identification (0, 1, 2, 3, 4 or 5)	Default **0**	Always printed if data is present
F8	Fixed text input.		
F9	Browse or auto search when creating or editing PLUs.		
F10	Return to start of screen or to previous menu.		
F6	With cursor on PLU number, copies PLU when in Create and Edit PLU.		
#	Text reference (followed by the text reference number)		

5.5 Useful parameters and functions

5.5.1 Parameters

Parameter	Index	Description	Attribute
88	4	PASSWORD	

96	50	Jump to label program 50	

3	3	Return to start	

3	5	Return to previous menu	

Automatic and manual modes

Parameter	Index	Description	Attribute
570	76	125 (automatic)	
570	76	250 (manual)	

In manual mode the applicator still operates.

5.5.2 Functions and subroutines

\# in the attribute column means that the new value will be stored in the memory and recalled when the PLU is selected. The new value can be either programmed in PLU edit or entered by the operator when the PLU is selected.

Labelling Program 102					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	62	0	Unit price	#	0
2	63	0	Tare		0
3	3	5	Return to previous menu		0

\# saves the price change when PLU is deselected.

Set–up for long packs

Line	Code	Sub code	Description	Attribute	Value
1	60	0	PLU Number		0
2	125	1	LONG PACKS ON		0

Insert parameter 125_1 below parameter 60_0 in the labelling program.

If you see LONG PACKS OFF in the description for parameter 125_1 it really means LONG PACKS ON.
Use 125 – 0 in another labelling program to turn LONG PACKS OFF if necessary.

Switching to customer menu

MK in a menu will switch you back to the Operator menus if there is no security dongle inserted.

Example:

Parameter Number	Index	Description
660	0	MK,5,6,22,21,14,1,M1;PROGRAMMING AND SERVICE MENU
660	1	MAIN MENU
660	2	PARAMETER LIST
660	3	FUNCTIONS LIST
660	4	BARCODE FORMAT
660	5	COUNTRY CODE
660	6	FIELD DEFINITION LIST
660	7	LABELLING PROGRAM
660	8	SERVICE DATA MANAGEMENT (M)

5.6 Transmit weight and PLU number

Labelling Program 112					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	3	1	Special Mode 1		0
2	90	7	BRA. IF WEIGHT TO		4
3	90	0	Branch always to		1
4	58	0	TRANSMIT TO HOST		899.14
5	90	0	Branch always to		1

Enter the net weight parameter and index number, and PLU number in the description column of parameter 899.14 in the parameter list.

Example:

Net weight parameter and index number 11.0; PLU number 60.0
Enter as 11.0, 60.0;

Parameter	**Index**	**Description**	**Attribute**	**Value**
899	14	11.0, 60.0;		0

5.7 Printing

5.7.1 Total 4 print out

PLU number

888888 totals will be printed on labels
999999 totals will be printed on continuous paper

Sort type

0 = PLU then customer
1 = Customer then the PLU

5.7.2 Advertising text

Labelling Program					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	56	1	ENABLE ADVERT TEXT		0

With this function in the labelling program a ‘stored advertising text’ may be assigned to the PLU when it is selected and will be printed in the appropriate field on the label.

Inserting # in the attribute column will store the advertising text with the PLU when it is deselected. When the PLU is recalled the stored text number may then be accepted or changed by the operator.

5.7.3 Operator input

Use parameter 200.03 after parameter 60.00 in the labelling program. You can use this parameter several times if needed. Enter the parameter number for the PLU text in in the value column against parameter 200.03. This particular example allows the operator to insert the PLU description for line 1 and line 2 when the PLU is selected.

You could use this function to print batch or lot numbers on labels to assist traceability.

Labelling Program					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	60	0	PLU Number		0
1	200	03	Operator entry		100.01
1	200	03	Operator entry		100.02

Remember to enable a field in the label format for each Operator Input to be printed.

5.8 Operator information

Displays text to the operator. The text message must be defined within the labelling program under the number shown in the value column.

Parameter	Index	Description	Attribute	Value
200	00	Operator information		900.03
200	01	Operator information (3 sec)		553.04

5.9 Passwords

You can include passwords in labelling programs by inserting the parameter 88.04 in the appropriate position.

5.9.1 Total 3

Enter 99 in the value column against parameter 88.04 to protect the printing of total 3.

Labelling Program					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	60	0	PLU Number		0
2	88	4	PASSWORD		99

5.9.2 Invisible passwords

You can use up to three invisible passwords. Enter the passwords you want to use in the parameter numbers 496.01, 496.02, 496.03 (references .P1, .P2 and .P3).

Parameter	Index	Description	Attribute	Value
496	1	Your password name		
496	2	Your password name		
496	3	Your password name		

Insert the password reference in the menu line at the appropriate position.

Example:

Menu item 8, SERVICE DATA CALIBRATION is protected by the invisible password, reference P1.

Product data (sub–menu M2)

Parameter Number	Index	Description
560	0	M0,16,40,2,15, 23, 64, 43. P1; PRODUCT DATA
560	1	MAIN MENU
560	2	CREATE/EDIT PLU
560	3	PLU TEXTS
560	4	INGREDIENTS TEXTS
560	5	ADVERTISING TEXTS
560	6	DATE TEXTS
560	7	WEIGHT BANDS
560	8	SERVICE CALIBRATION (SERVICE)

5.10 Designing label fields

Initially create a small field, for example, two characters. Move and manipulate this field until you have it in the correct position before enlarging it to the required size.

5.11 Country codes

Information relating to a specific country is contained in the country format and stored under the country code. You can create several country formats but only one may be used in each PLU.

The default country format enabled is 6. To use a different country format for the default setting, enter the code for the one you require in the parameter description for parameter 555_0. See section 16, page 16–1 in the B806 Programming Instructions.

The country format specifies:

- the texts in the calibration section of the display
- currency and weight symbols for the printer
- formats for unit price, weight, price to pay, tare, quantity of single labels
- formats for weight, price, quantity of total labels
- type of rounding for the price.

5.11.1 Creating country formats

Country formats are created in the Country Code program which is in the Programming and Service Menu.

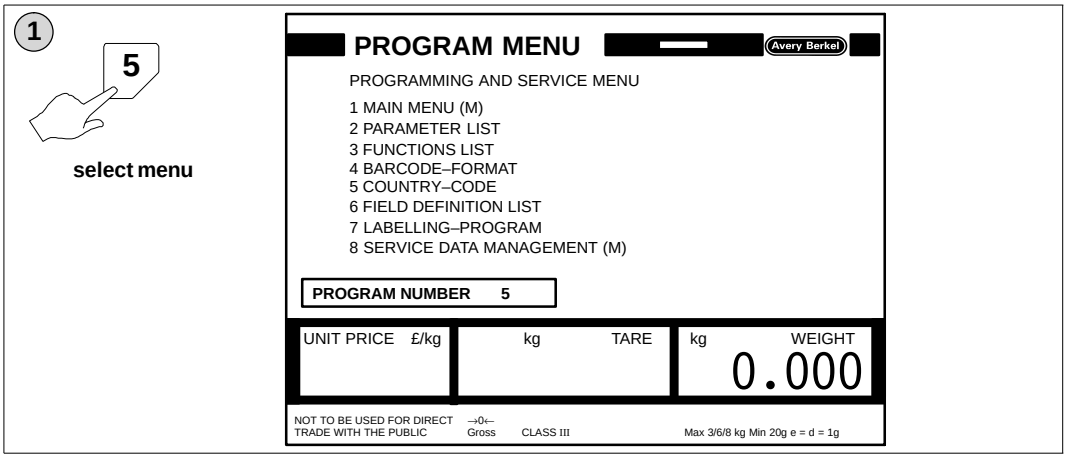
You can only access the programming and service menus if you have been supplied with a dongle (security device) see section 1, page 1–3 in the B806 Programming Instructions.

If you enter a number that has already been used, the data stored for that country format will be displayed on the screen.

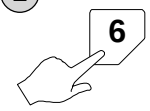
Press △ to return to the start and enter a new name.

Press F10 to return to the Programming and Service Menu.

Make sure that you satisfy any weights and measures regulations that may apply.



2



Country code

COUNTRY CODE Avery Berkel

Country No.	6 _ _ _ _ _ _ _ _ _ _ _ _ _ _
Name	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Rounding	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text Line 1	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text Line 2	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Price Symbol Minus	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 4 (net)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 5 ( )	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 6 (CLASS)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 7 ( )	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 8 (du= dp=)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 9 (Max/Min)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text Unit Price	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _

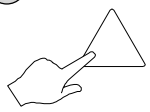
3

confirm entry

COUNTRY CODE Avery Berkel

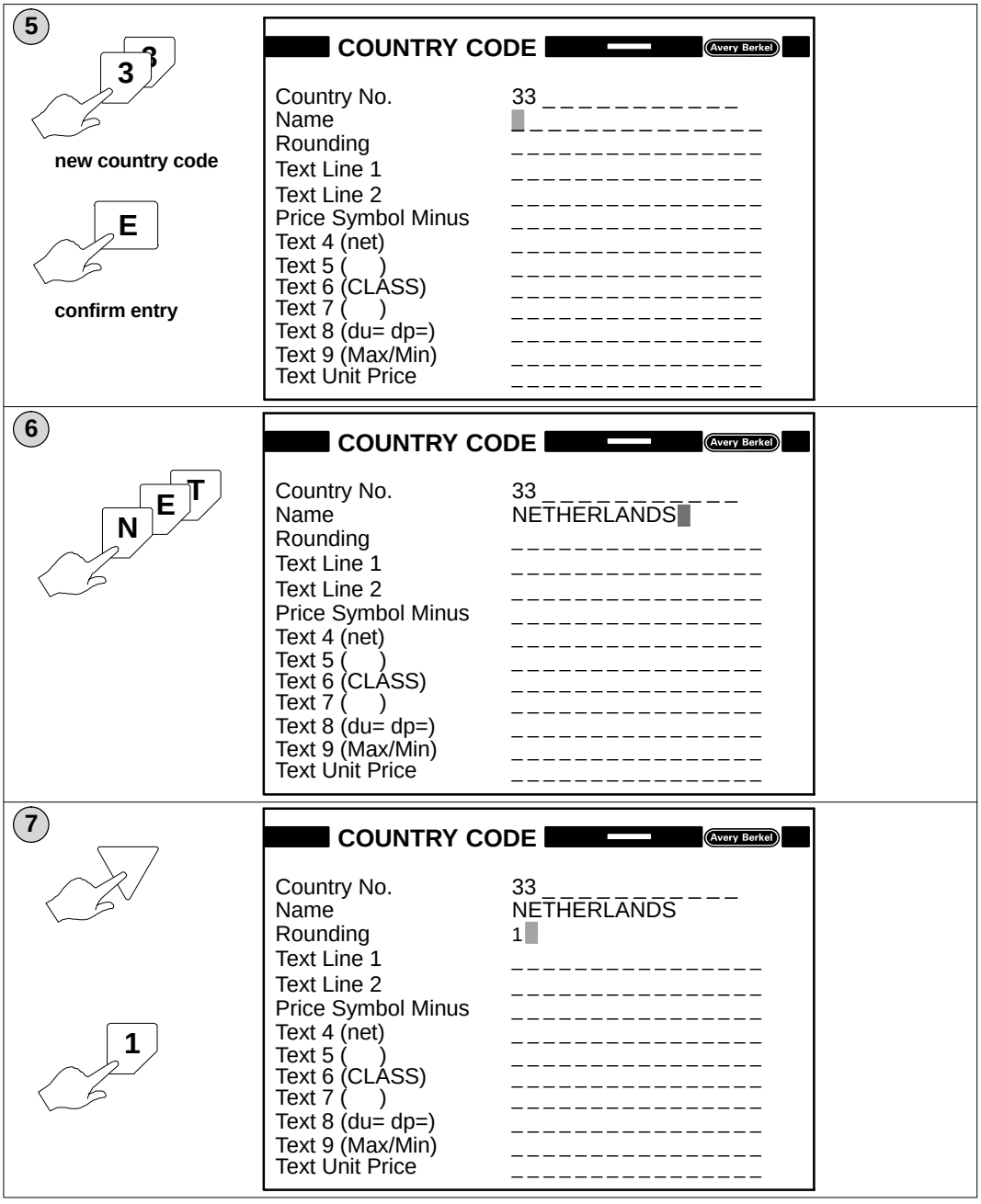
Country No.	6
Name	GB kg with symbols_ _ _
Rounding	1
Text Line 1	NOT TO BE USED FOR DIRECT
Text Line 2	TRADE WITH THE PUBLIC
Price Symbol Minus	£; £/kg; kg
Text 4 (net)	Net
Text 5 ( )	Gross
Text 6 (CLASS)	CLASS
Text 7 ( )	Weight Range
Text 8 (du= dp=)	
Text 9 (Max/Min)	1
Text Unit Price	UNIT PRICE £/kg

4

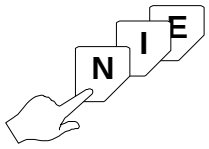


COUNTRY CODE Avery Berkel

Country No.	6 _ _ _ _ _ _ _ _ _ _ _ _ _
Name	GB kg with symbols
Rounding	1
Text Line 1	NOT TO BE USED FOR DIRECT
Text Line 2	TRADE WITH THE PUBLIC
Price Symbol Minus	£; £/kg; kg
Text 4 (net)	Net
Text 5 ( )	Gross
Text 6 (CLASS)	CLASS
Text 7 ( )	Weight Range
Text 8 (du= dp=)	
Text 9 (Max/Min)	1
Text Unit Price	UNIT PRICE £/kg


5
3
new country code
E
confirm entry
COUNTRY CODE
Avery Berkel
Country No. 33
Name
Rounding
Text Line 1
Text Line 2
Price Symbol Minus
Text 4 (net)
Text 5 ( )
Text 6 (CLASS)
Text 7 ( )
Text 8 (du= dp=)
Text 9 (Max/Min)
Text Unit Price
6
N
E
T
COUNTRY CODE
Avery Berkel
Country No. 33
Name NETHERLANDS
Rounding
Text Line 1
Text Line 2
Price Symbol Minus
Text 4 (net)
Text 5 ( )
Text 6 (CLASS)
Text 7 ( )
Text 8 (du= dp=)
Text 9 (Max/Min)
Text Unit Price
7
1
COUNTRY CODE
Avery Berkel
Country No. 33
Name NETHERLANDS
Rounding 1
Text Line 1
Text Line 2
Price Symbol Minus
Text 4 (net)
Text 5 ( )
Text 6 (CLASS)
Text 7 ( )
Text 8 (du= dp=)
Text 9 (Max/Min)
Text Unit Price

8

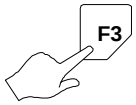


COUNTRY CODE Avery Berkel

Country No.	33 _ _ _ _ _ _ _ _ _ _ _ _
Name	NETHERLANDS
Rounding	1
Text Line 1	NIET VOOR
Text Line 2	HANDELSDOELEINDEN
Price Symbol Minus	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 4 (net)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 5 ( )	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 6 (CLASS)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 7 ( )	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 8 (du= dp=)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 9 (Max/Min)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text Unit Price	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

9 Repeat until you have entered all the data for the new country format.

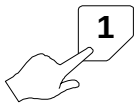
10



COUNTRY CODE Avery Berkel

Country No.	33 _ _ _ _ _ _ _ _ _ _ _ _
Name	NETHERLANDS
Rounding	1
Text Line 1	NIET VOOR
Text Line 2	HANDELSDOELEINDEN
Price Sym	**SAVE ?Yes = 1 No = 0**
Text 4 (ne	
Text 5 ( )	Bruto
Text 6 (CLASS)	KLASSE III
Text 7 ( )	Gewicht bereik
Text 8 (du= dp=)	
Text 9 (Max/Min)	1
Text Unit Price	eenheids prijs ƒ/kg

11



COUNTRY CODE Avery Berkel

Country No.	33 _ _ _ _ _ _ _ _ _ _ _ _
Name	NETHERLANDS
Rounding	1
Text Line 1	NIET VOOR
Text Line 2	HANDELSDOELEINDEN
Price Sym	**SAVING IN PROGRESS**
Text 4 (net	
Text 5 ( )	Bruto
Text 6 (CLASS)	KLASSE III
Text 7 ( )	Gewicht bereik
Text 8 (du= dp=)	
Text 9 (Max/Min)	1
Text Unit Price	eenheids prijs ƒ/kg

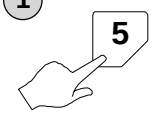
12 Press F10 to return to Programming and Service Menu.

5.11.2 Copying country formats

You can copy an existing country format and edit the entries to create your own customised formats.

Make sure that you satisfy any weights and measures regulations that may apply.

1



select menu

PROGRAM MENU Avery Berkel

PROGRAMMING AND SERVICE MENU

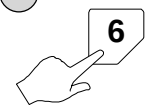
1 MAIN MENU (M)
2 PARAMETER LIST
3 FUNCTIONS LIST
4 BARCODE–FORMAT
5 COUNTRY–CODE
6 FIELD DEFINITION LIST
7 LABELLING–PROGRAM
8 SERVICE DATA MANAGEMENT (M)

PROGRAM NUMBER 5

UNIT PRICE £/kg	kg TARE	kg WEIGHT
		0.000

NOT TO BE USED FOR DIRECT TRADE WITH THE PUBLIC — →0← Gross — CLASS III — Max 3/6/8 kg Min 20g e = d = 1g

2



Country code

COUNTRY CODE Avery Berkel

Country No.	6 _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Name	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Rounding	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text Line 1	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text Line 2	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Price Symbol Minus	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 4 (net)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 5 ( )	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 6 (CLASS)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 7 ( )	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 8 (du= dp=)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text 9 (Max/Min)	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Text Unit Price	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _

3

confirm entry

COUNTRY CODE Avery Berkel

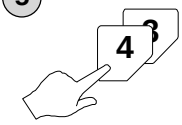
Country No.	6
Name	GB kg with symbols_ _ _
Rounding	1
Text Line 1	NOT TO BE USED FOR DIRECT
Text Line 2	TRADE WITH THE PUBLIC
Price Symbol Minus	£; £/kg; kg
Text 4 (net)	Net
Text 5 ( )	Gross
Text 6 (CLASS)	CLASS
Text 7 ( )	Weight Range
Text 8 (du= dp=)	
Text 9 (Max/Min)	1
Text Unit Price	UNIT PRICE £/kg

4

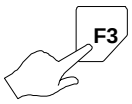
COUNTRY CODE Avery Berkel

Country No.	6 _ _ _ _ _ _ _ _ _ _ _ _
Name	GB kg with symbols
Rounding	1
Text Line 1	NOT TO BE USED FOR DIRECT
Text Line 2	TRADE WITH THE PUBLIC
Price Symbol Minus	£; £/kg; kg
Text 4 (net)	Net
Text 5 ( )	Gross
Text 6 (CLASS)	CLASS
Text 7 ( )	Weight Range
Text 8 (du= dp=)	
Text 9 (Max/Min)	1
Text Unit Price	UNIT PRICE £/kg

5



new country code

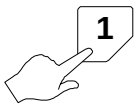


COUNTRY CODE Avery Berkel

Country No.	43 _ _ _ _ _ _ _ _ _ _ _ _
Name	GB kg with symbols
Rounding	1
Text Line 1	NOT TO BE USED FOR DIRECT
Text Line 2	TRADE WITH THE PUBLIC
Price Sym	
Text 4 (ne	
Text 5 ( )	Gross
Text 6 (CLASS)	CLASS
Text 7 ( )	Weight Range
Text 8 (du= dp=)	
Text 9 (Max/Min)	1
Text Unit Price	UNIT PRICE £/kg

SAVE ?Yes = 1 No = 0

6



COUNTRY CODE Avery Berkel

Country No.	43 _ _ _ _ _ _ _ _ _ _ _ _
Name	GB kg with symbols
Rounding	1
Text Line 1	NOT TO BE USED FOR DIRECT
Text Line 2	TRADE WITH THE PUBLIC
Price Sym	
Text 4 (ne	
Text 5 ( )	Gross
Text 6 (CLASS)	CLASS
Text 7 ( )	Weight Range
Text 8 (du= dp=)	
Text 9 (Max/Min)	1
Text Unit Price	UNIT PRICE £/kg

SAVING IN PROGRESS

7

Press △ or ▽ to move to the line you want to change.

Enter the new data for the lines you want to change

Press **F3** to save the changes

8

Press **F10** to return to Programming and Service Menu

Currency and weight symbols for printing

Letter	Hex	Print character set 98	Print character set 99
A		DM/kg	DM
B		kg	
C		F/kg	F
D		ƒ/kg	ƒ
E		Fr./kg	Fr
F		£	£
G		oz	oz
H		S/kg	S
I		L/kg	L
J		L	
K		$/kg	$
L		Kr./kg	Kr
M		M/kg	M
N		lb	
O		STÜCK	STÜCK
P		STUKS	STUKS
Q		ST./P.	ST./P.
R		PIECES	PIECES
S		PEZZI	PEZZI
T		PIEZAS	PIEZAY
Y	59	Kg (kyr)	
Z	5a		currency symbol (kyr)
[	5b	ESC/kg	
/	5c		ESC
)	5d	Sk/kg	
	5e		Sk
–	5f	Kc/kg	
Gelb+ –	60		Kc
a	61	zt/kg	
b	62		zt
u		£ kg	

character set 98: for unit price and weight symbols

character set 99: for price symbols (see label formats)

5.12 Data transfer

The data management functions enable you to save system data and product data to disk and to load the data from disk. You may also delete the data if necessary.

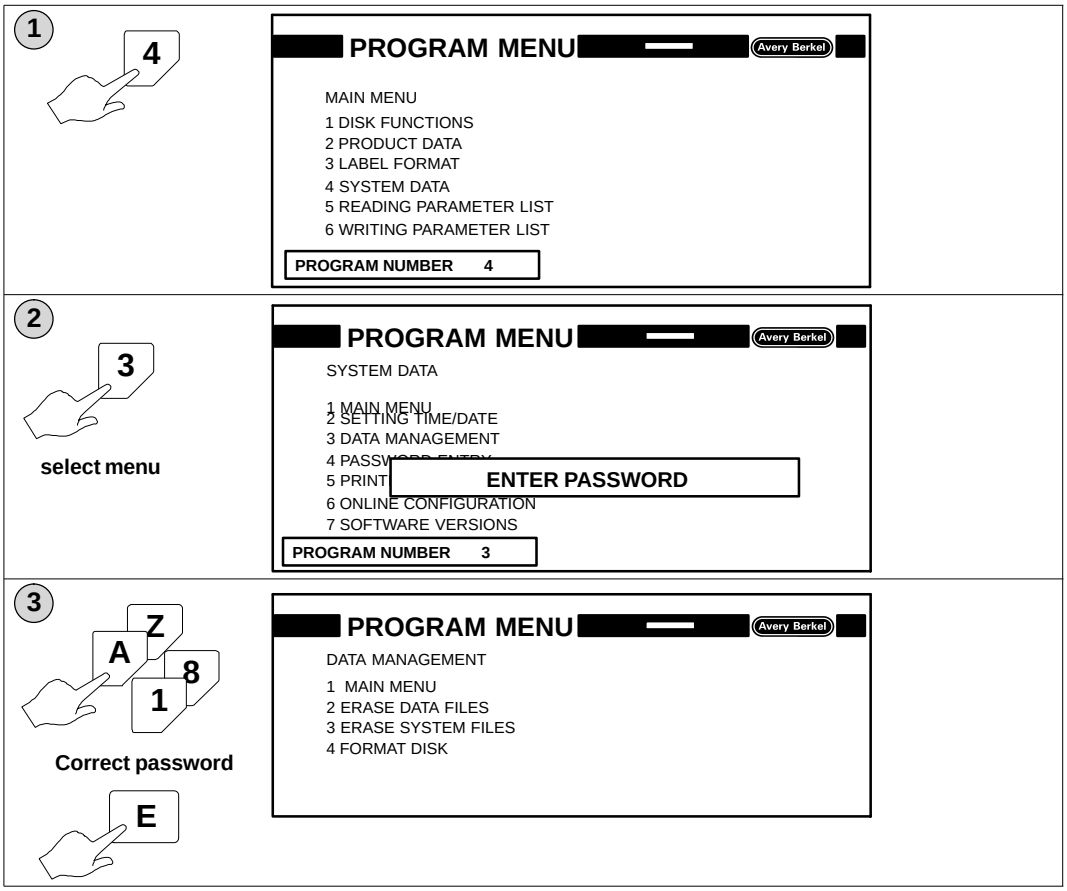
There are two routes available to the data management options:

- Operator Menus
  In the Operator Menus you may require a password to be able to use an option.
- Programming and Service Menus
  You can only access the programming and service menus if you have been supplied with a dongle (security device) see section 1, page 1–3 in the B806 Programming Instructions.

5.12.1 Operator menu route

If you see the message INCORRECT PASSWORD and you do not know the password you can press **E** several times to clear the message.

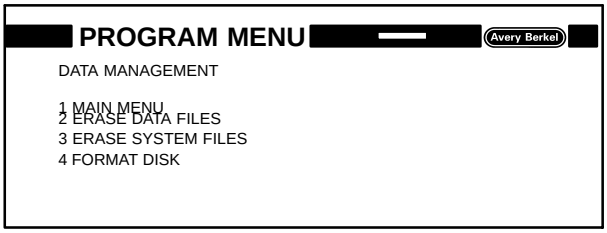
Press **F** to return to Main Menu.



4 If you see the message INCORRECT PASSWORD press **E** then repeat step 3 entering the correct password.

5 **3**

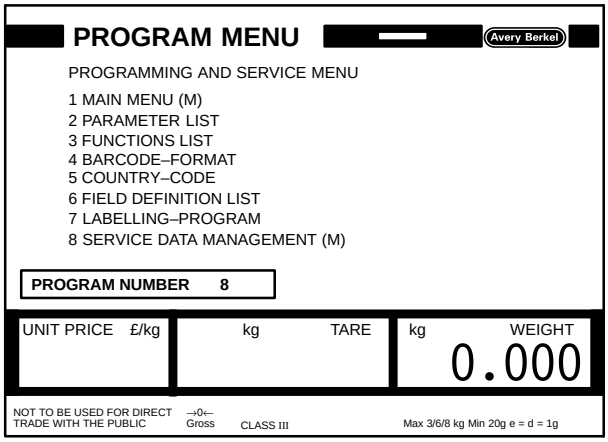
select option



5.12.2 Programming and service menu route

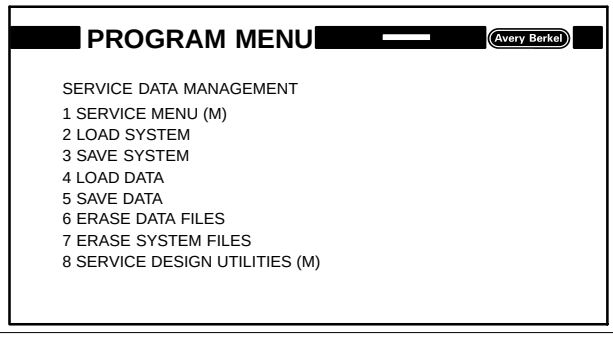
1 **8**

select menu



2 **7**

select option



5.13 System files

System files store the data needed to operate the B806/B901 and may be referred to as the operating system.

5.13.1 System file names

System files are identified by a file name and file extension. The name and the extension are separated by a point and both the name and extension are used together to uniquely identify the system file. The file name has a maximum of eight characters.

Example:

SYSTEM . FUN

Filename Extension

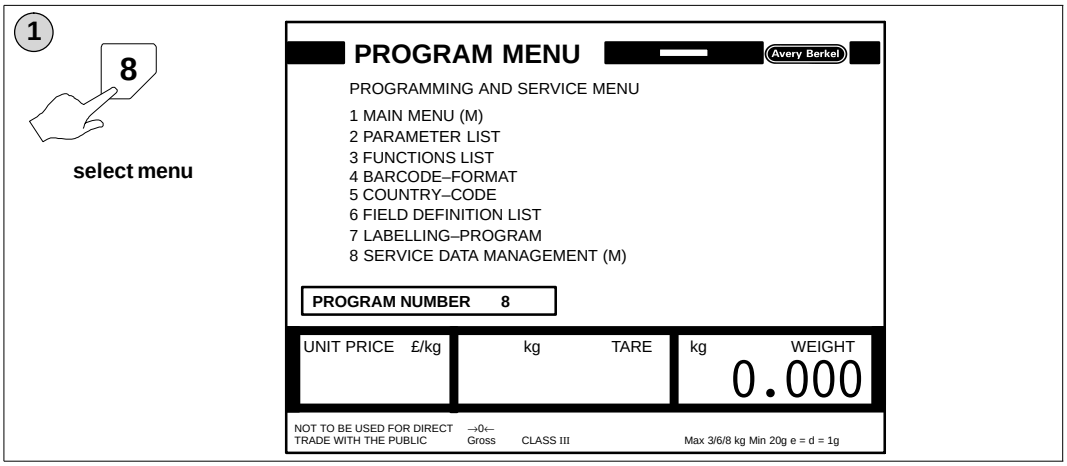
The file extension has three characters and you must use the correct extension for the type of data you want to save or load. Listed below are the file extensions used by the B806/B901 and the type of system file to which they apply.

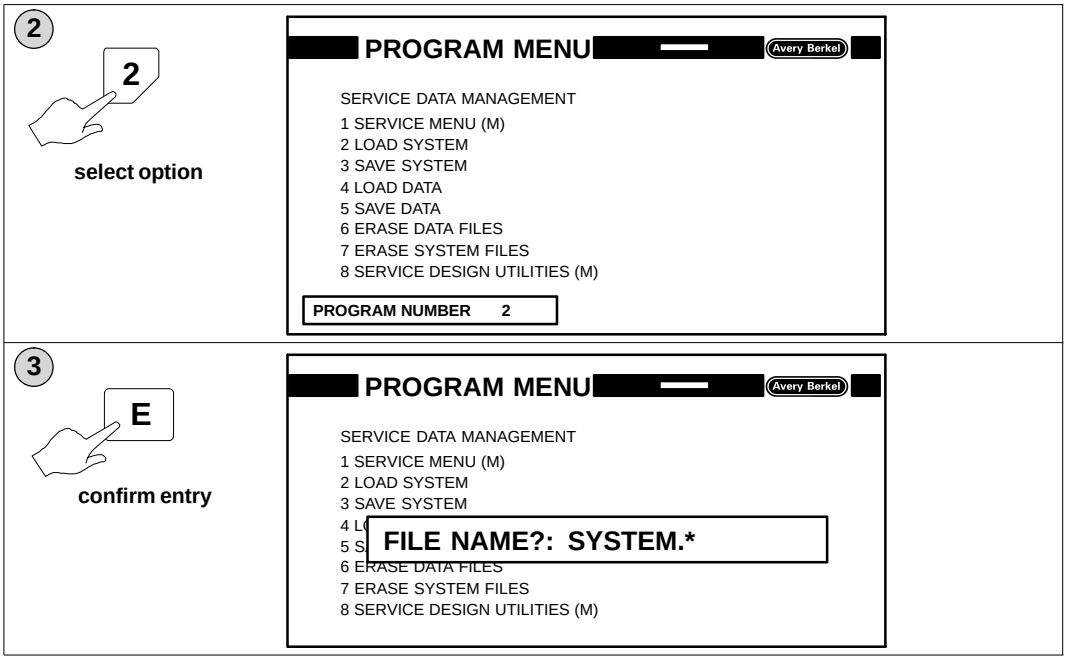
.SYS	Parameter list
.FUN	Function list
.LFL	Field definition list
.VER	country formats
.BAR	Barcode formats
.DEV	Device configuration

5.13.2 Loading system files from disk

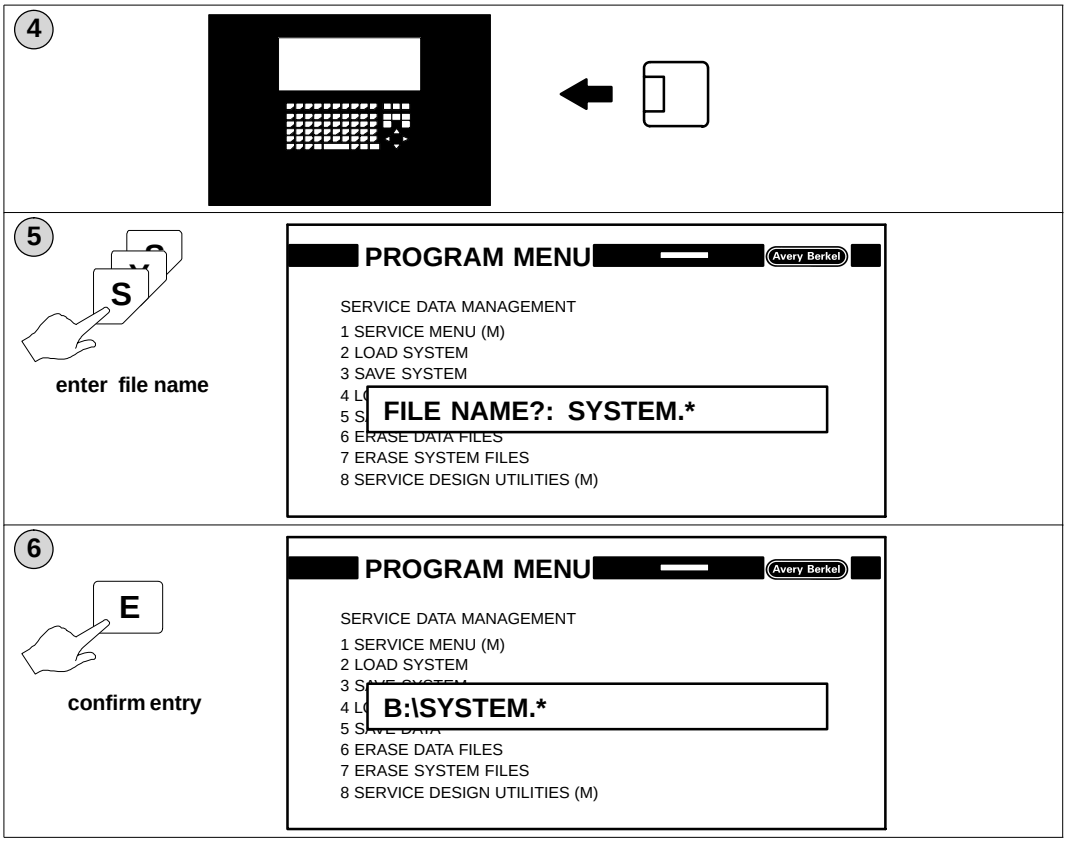
The system data is added to by the records loaded from the disk and records with the same number are overwritten. Always make a new backup disk for the operating system after any changes to the system files.

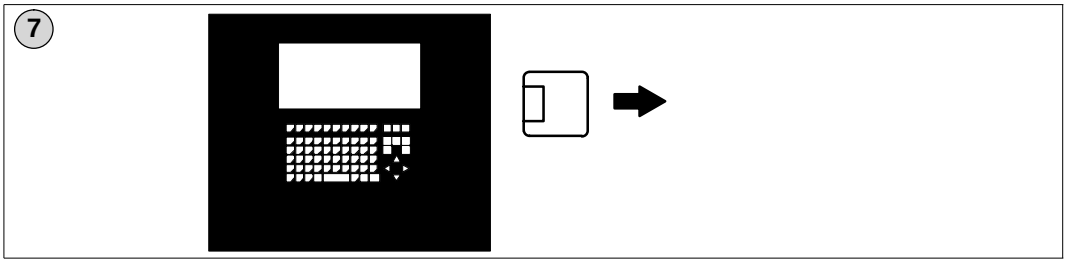
Use this function when you need to update your system files.



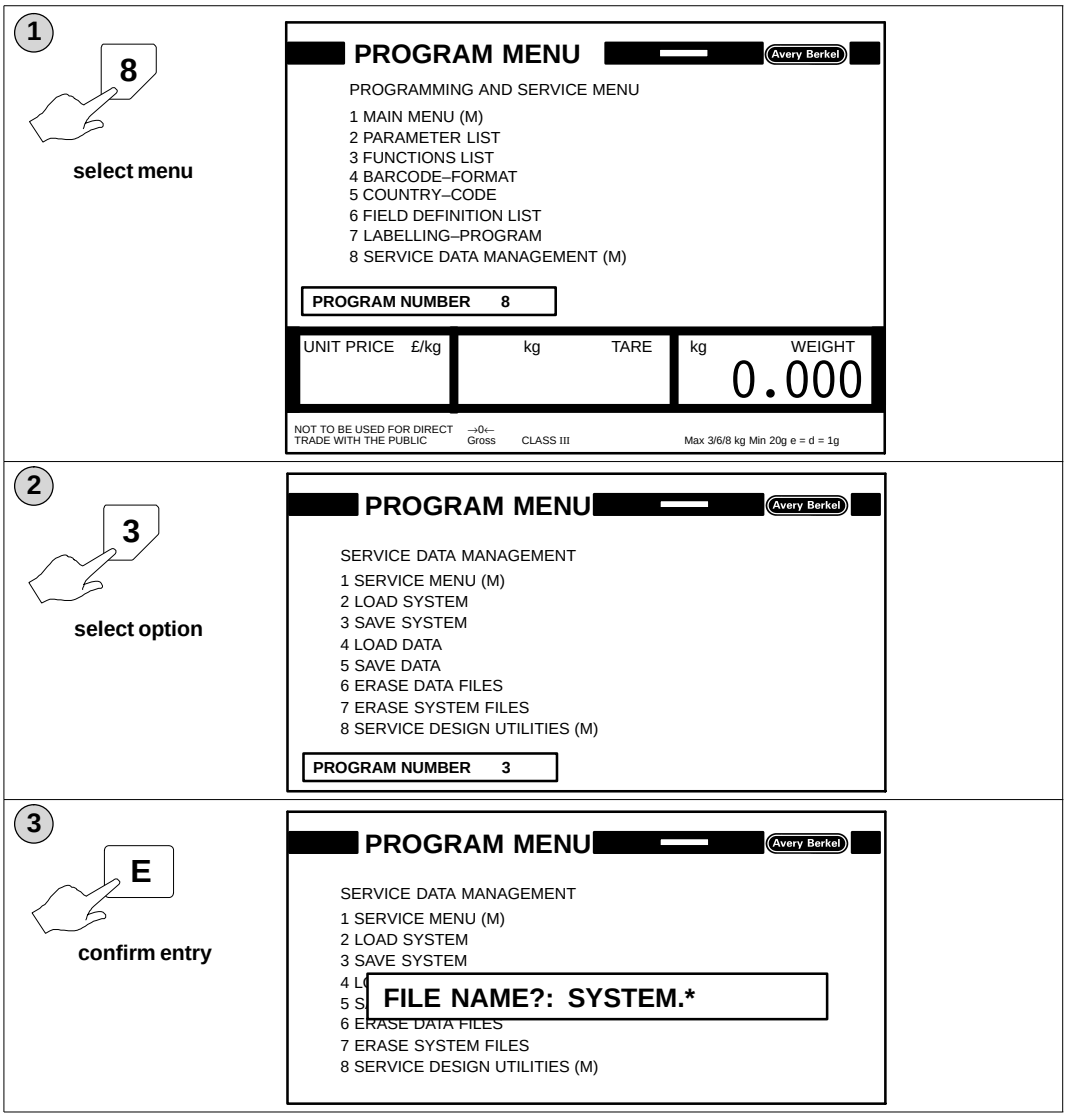


The default file name is SYSTEM.

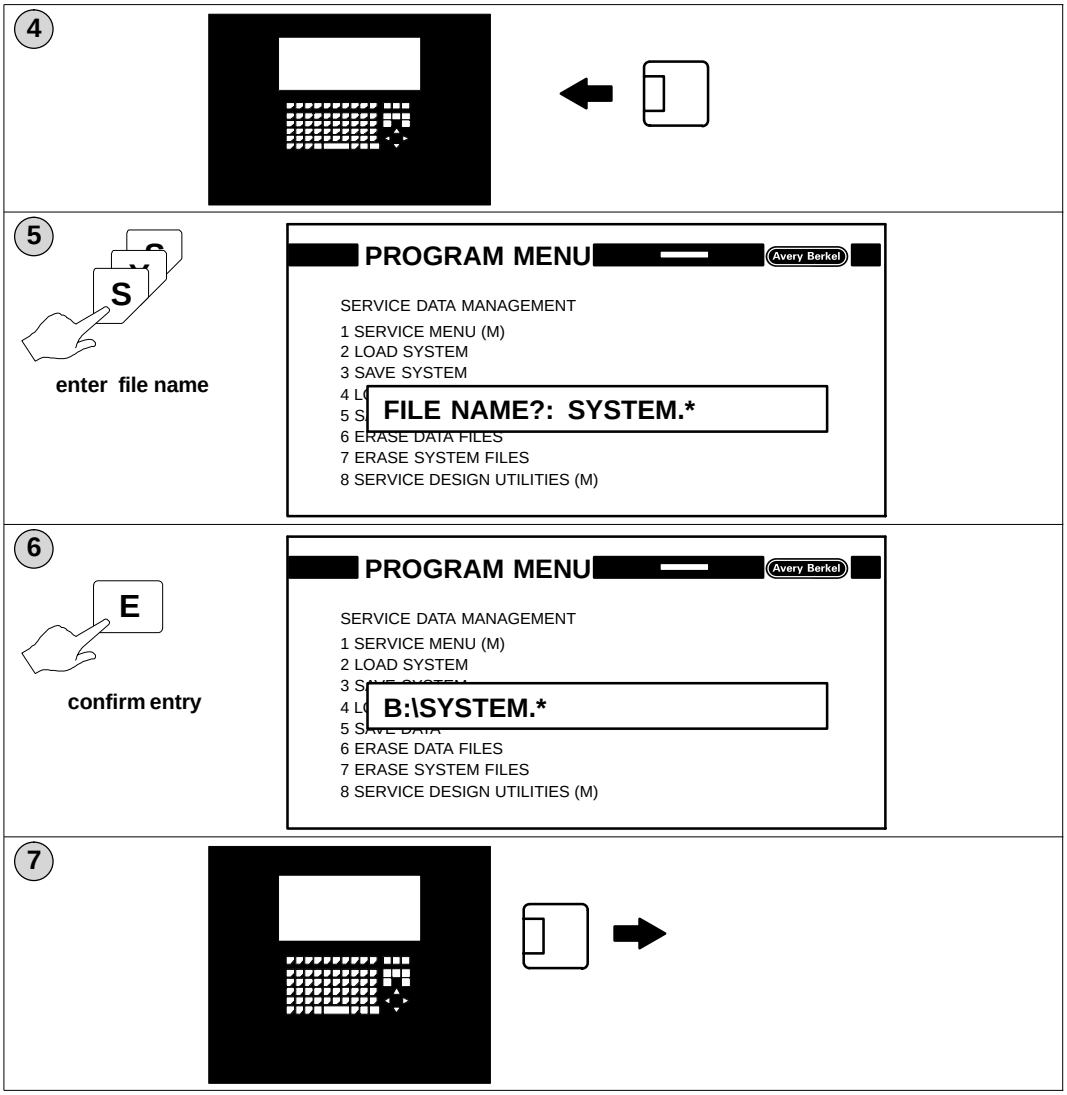




5.13.3 Saving system files to disk



The default file name is SYSTEM.



You must use an empty disk to create the backup. Saving system files to an existing backup disk will not overwrite unwanted data.

5.14 Data files

5.14.1 Data file names

Data files are identified by a file name and file extension. The name and the extension are separated by a point and both the name and extension are used together to uniquely identify the data file. The file name describes the content of the file and can have up to eight characters. The first one must be an alpha character.

Example:

DATA . PLU

Filename Extension

The file extension has three characters and you must use the correct extension for the type of data you want to save or load. Listed below are the file extensions used by the B806/B901 and the type of data to which they apply.

.TXL	Article texts
.ITL	Ingredient texts
.DTL	Date texts
.AVL	Advertising texts
.RT1	List 1 texts
.OPS	Labelling program
.FOR	Label formats
.FON	Character records
.PLU	PLU numbers
.CUS	Customer numbers
.PRS	Printer set–up values
.PWL	Password entry
TOT	Total 4

If you want to save or load all the data files stored with the same name use the file extension:

. *

For example, if you enter the name **DATA.*** all files with that name, for example, **DATA.PLU**, **DATA.FON**, **DATA.CUS**, will be saved or loaded at once.

Keep a note of any filenames you use that are different from the default filename.

5.14.2 Deleting the data files

PLU numbers, label formats, labelling programs, PLU texts, etc. are stored in the RAM. If you frequently add or delete data the system will contain redundant data. This data occupies RAM storage space and reduces the amount of memory available.
To overcome this problem:

1 Save the current data to disk as a backup.

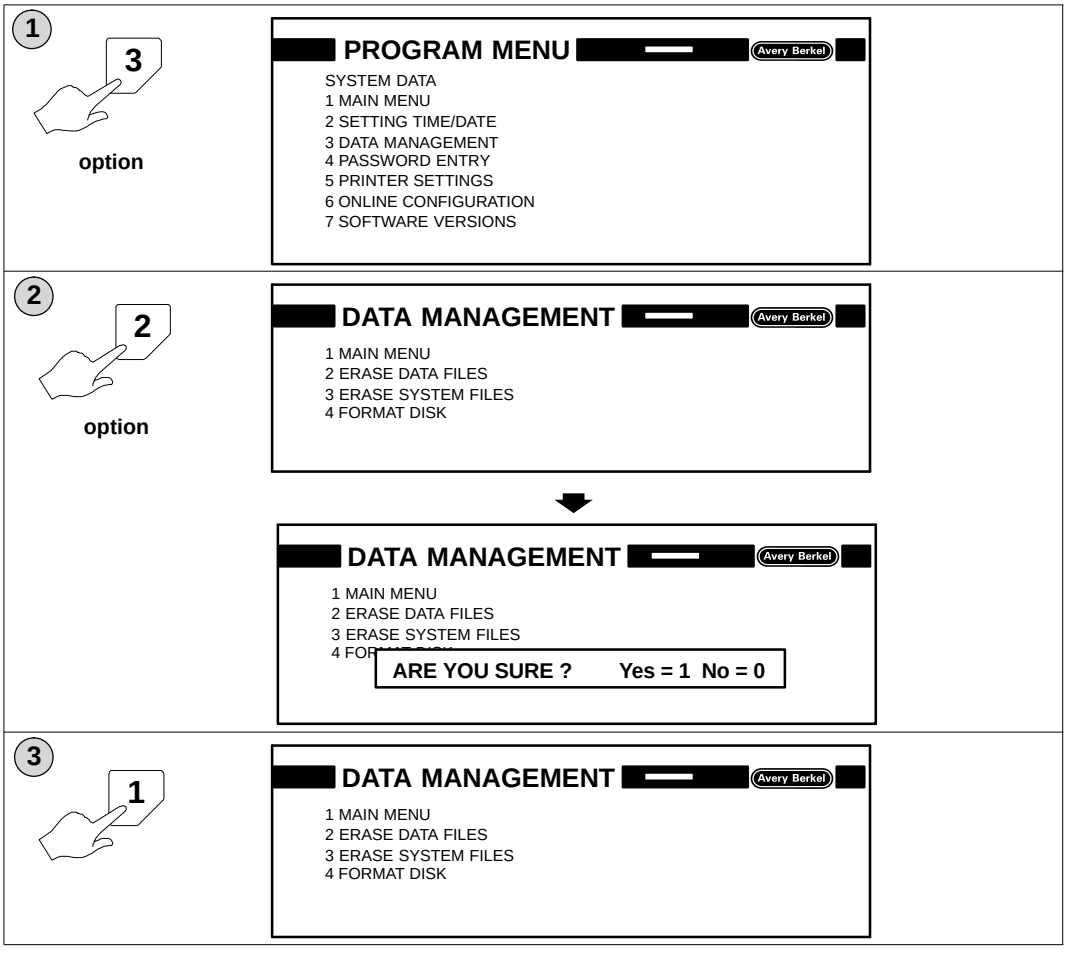
2 Delete all the redundant data.

3 Save the useful data to a **new** disk as a new backup.

This process is only necessary when the RAM storage is almost full!

You must use an empty disk to create the new backup. Saving data files to an existing backup disk will not overwrite unwanted data.

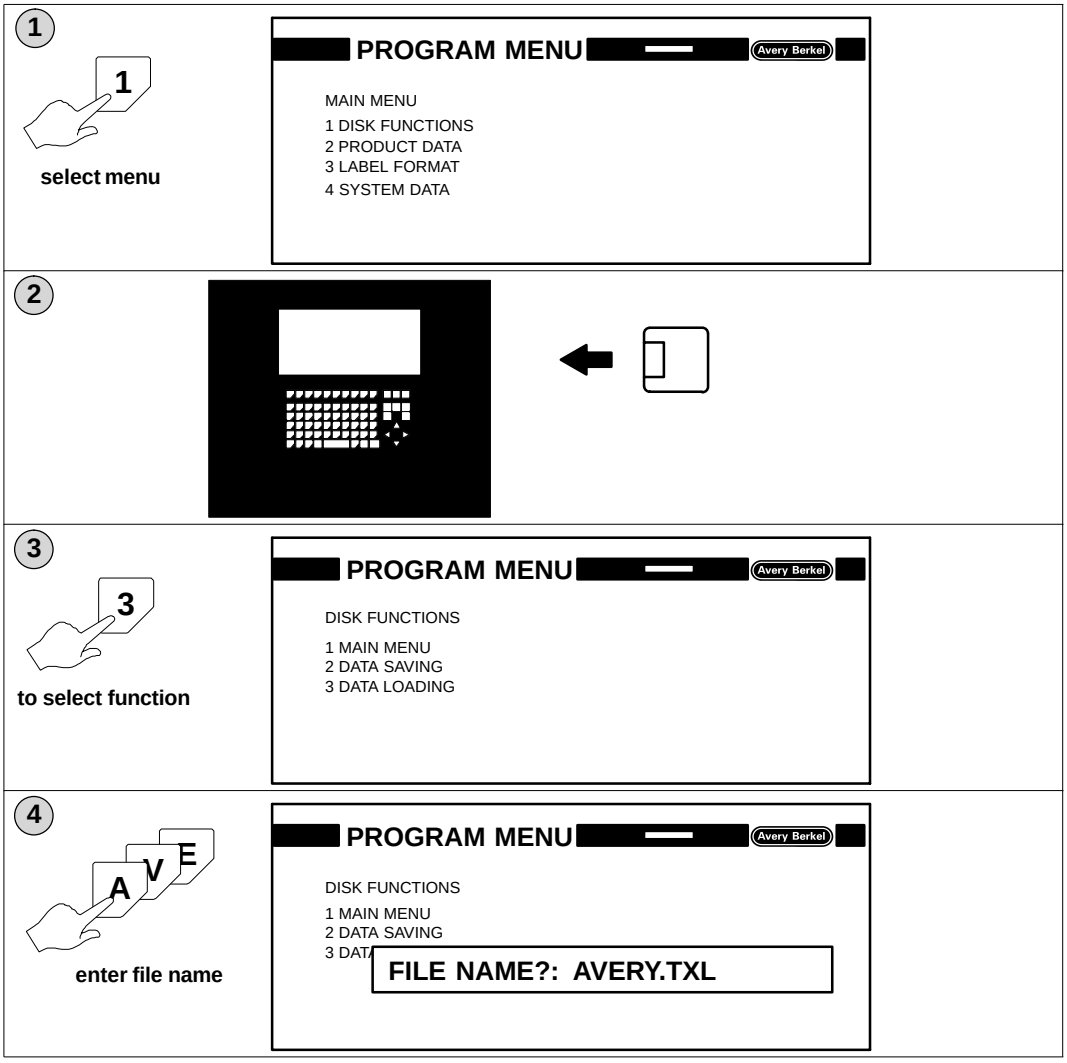
This option may be password protected.



If you press 1 deleting the data will begin immediately.

5.14.3 Loading data from disk

The RAM is not cleared when data is loaded from disk. The RAM data is added to by the records loaded from the disk and records with the same number are overwritten.



Ensure that write protect is enabled on the floppy disk before you insert it to protect the data on the disk from corruption.

5

PROGRAM MENU

DISK FUNCTIONS

1 MAIN MENU
2 DATA SAVING
3 DATA

B:\AVERY.TXL

PROGRAM MENU

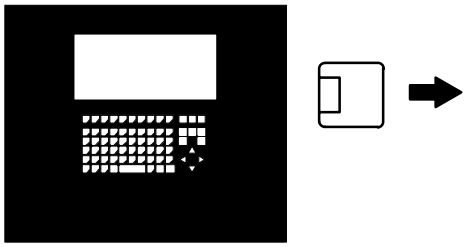
DISK FUNCTIONS

1 MAIN MENU
2 DATA SAVING
3 DATA

SAVING IN PROGRESS

6

You may remove the disk when the display message has disappeared.



5.14.4 Saving data to disk

1

return to main menu

PRE–PACK MODE

PLU No 1 1 2
Unit price 5.00
Tare 0.015

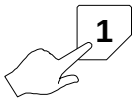
COOKED CHICKEN LEGS

label position 175

UNIT PRICE £/kg	kg TARE	kg WEIGHT
5.00	0.015	0.200

NOT TO BE USED FOR DIRECT TRADE WITH THE PUBLIC Net CLASS III Max 3/6/8 kg Min 20g e = d = 1g

2

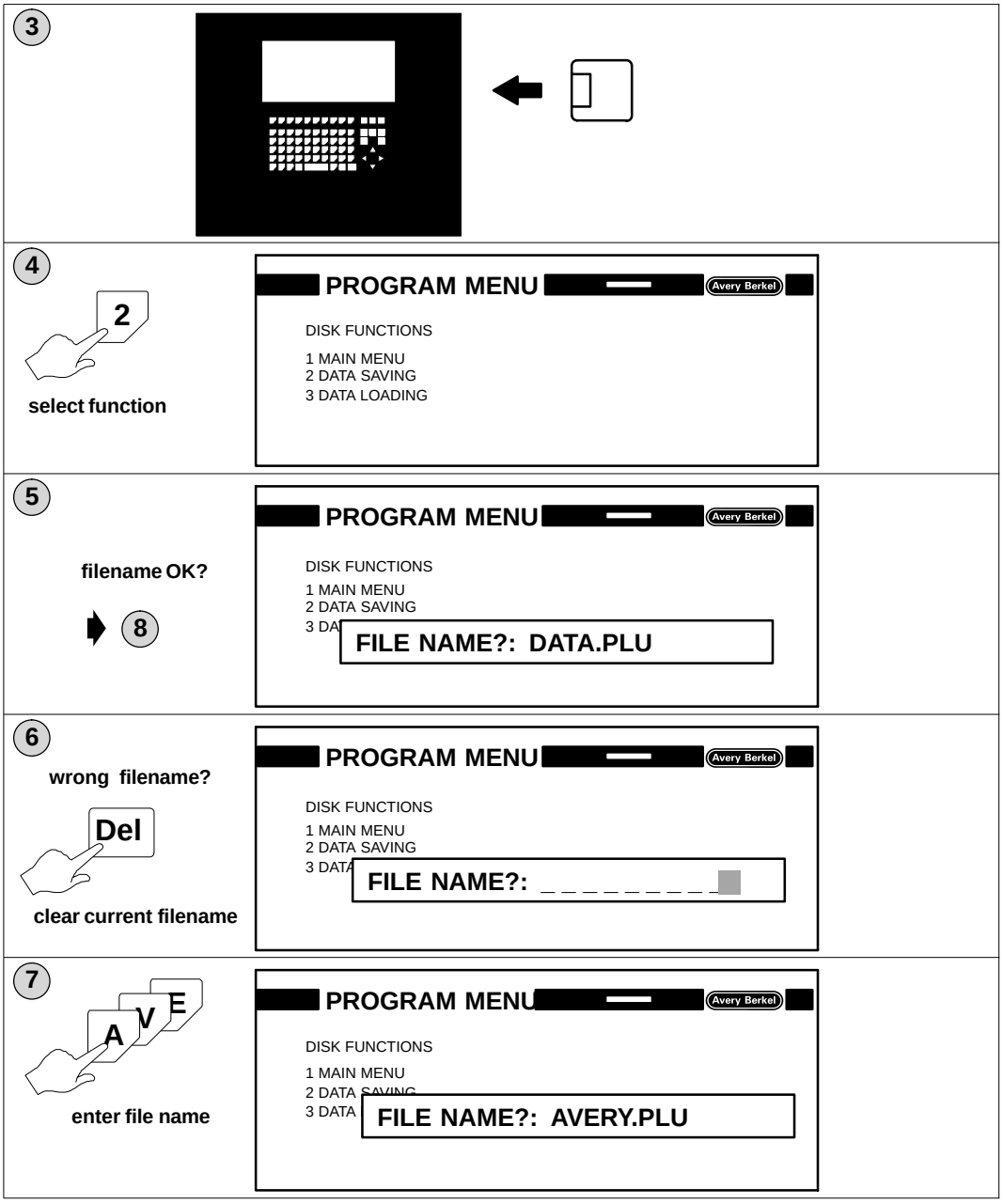


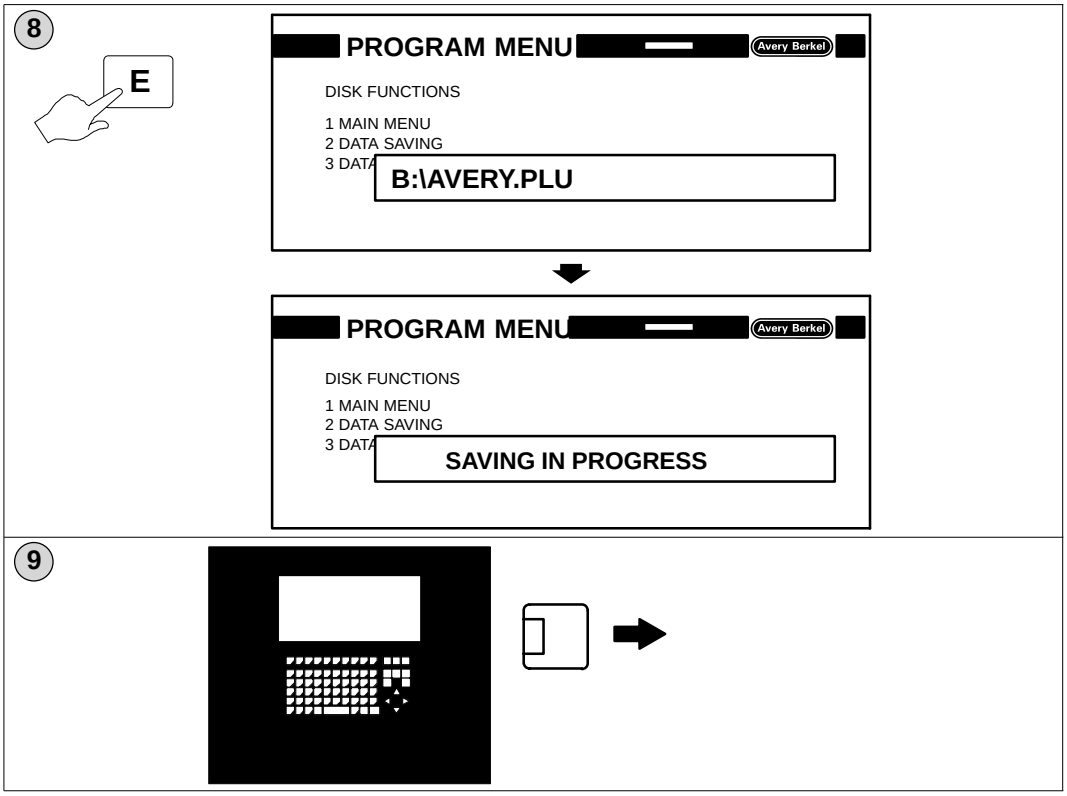
select menu

PROGRAM MENU

MAIN MENU

1 DISK FUNCTIONS
2 PRODUCT DATA
3 LABEL FORMAT
4 SYSTEM DATA


3
4
2
select function
PROGRAM MENU
Avery Berkel
DISK FUNCTIONS
1 MAIN MENU
2 DATA SAVING
3 DATA LOADING
5
filename OK?
8
PROGRAM MENU
Avery Berkel
DISK FUNCTIONS
1 MAIN MENU
2 DATA SAVING
3 DA
FILE NAME?: DATA.PLU
6
wrong filename?
Del
clear current filename
PROGRAM MENU
Avery Berkel
DISK FUNCTIONS
1 MAIN MENU
2 DATA SAVING
3 DATA
FILE NAME?: _ _ _ _ _ _ _ _ _
7
A
V
E
enter file name
PROGRAM MENU
Avery Berkel
DISK FUNCTIONS
1 MAIN MENU
2 DATA SAVING
3 DATA
FILE NAME?: AVERY.PLU



Caution:
Always use a separate disk to save your data files. Do not use your system disk.

Do not remove the disk until the disk light is extinguished.

5.15 Label specification

Label size

	Length	Width
Maximum	100 mm	88 mm
Minimum	37 mm	37 mm

Maximum printing width 78 mm

Maximum label roll diameter 240 mm

No joints permitted in the roll.

Labels wound inside; labels wound outside is a non–preferred option.

Core internal diameter 76 mm + 0.5 mm

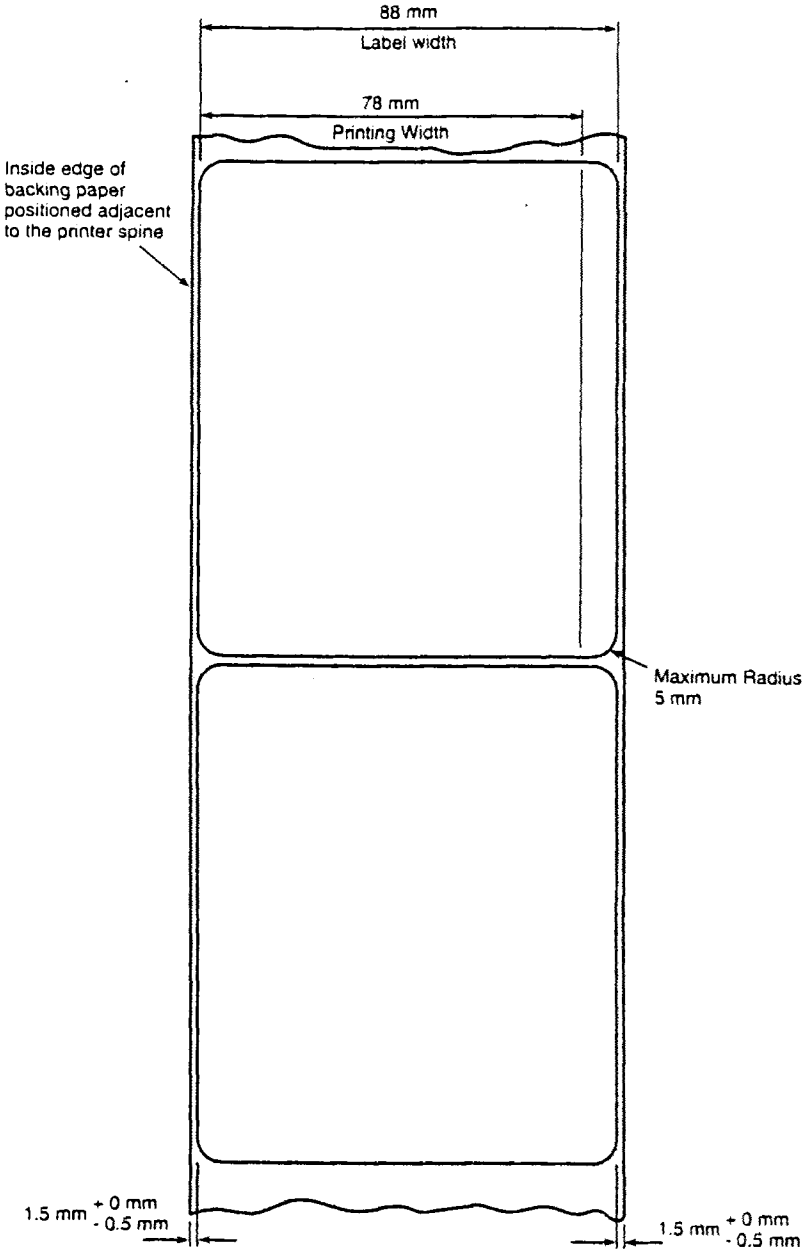
Gap between labels

Maximum	9 mm + 0.6 mm
Minimum	2 mm + 0.6 mm
Preferred	4 mm + 0.6 mm

NOTE: *The maximum gap must be measured at a point 1.5 to 2 mm from the edge of the backing paper. Radius corners must be taken into consideration when taking this measurement.*

Paper quality Richo 130 or equivalent

Adhesive 'Cold Pack' permanent


88 mm
Label width
78 mm
Printing Width
Inside edge of backing paper positioned adjacent to the printer spine
Maximum Radius 5 mm
1.5 mm + 0 mm - 0.5 mm
1.5 mm + 0 mm - 0.5 mm

5.16 EAN 128 bar code creation

5.16.1 Introduction

The EAN 128 C bar code is a flexible numeric code.

Within the code you may insert a variety of data depending on the customers requirement.

e.g. Weight, date, price, Lot number numeric code, time, PLU number etc.

Probably the only restriction is the space available to print the code on the label.

5.16.2 Application identifiers

To enable the Barcode scanner, and any associated system to decode and interpret the data within the code, each element of the data is preceded by 'Application Identifier' (AI).

e.g. the AI for a weight defined in kilograms is 3103 where the final 3 denotes that the encoded weight is expressed with 3 decimal places.

e.g. a weight of 3.997 kg would be encoded as:

3103	003997
AI for weight with 3 decimal points	Weight of 3.997kg

The AI for the date is 15.

A full list of **Standard** Application Identifiers is attached.

5.16.3 Identifying the EAN128C code

In addition to the AI the whole code must be identified as an EAN128 C code.

This is accomplished by starting the code with a Start symbol for EAN 128 C

followed by a · 'Function 1 symbol', (Abbreviated to FNC 1).

In the B806 and B901 these symbols are expressed as

Start symbol for EAN 128 C **Č** Character:

Press Compose followed by F4 then C to create.

Function 1 symbol, (Abbreviated to FNC 1) Γ Character:

Press Function followed by Z to create.

5.16.4 Double density

The code is sometimes described as a double density code, which means that each element within the code consists of 3 dark bars (made up from 11 dark modules grouped into 3 bars), and 3 light bars (made up from 11 light modules grouped into 3 bars).

Therefore the scanner reads the width of the dark and light modules and decodes one character from the dark modules and one from the light modules.

The bar code can therefore contain twice as much information, as say an EAN 13 code of similar size, where light space only acts as a separator between the dark modules.

5.16.5 Creation procedure

1 Ensure that the description for parameter number 497–2 includes parameter 48.

2 Add 48.0 to the print definition list which is to be associated with the label format you wish to use.

3 Create the new Barcode table as per the example below.

NOTE: **Č** *character is created by pressing* Compose *followed by* F4 *followed by* C*.*

Γ *character is created by pressing* Function *followed by* Z*.*

Barcode format number 33 Parameter 48 index 0 no of digits 24

Line Num	Par. Num	Index	Description	Type	Position	Direction	Explanation 1
1	556	8	Special character	Č	1	R	Start symbol EAN128 C
2	556	8	Special character	Γ	1	R	FNC1 – Symbol
3	556	8	Special character	9	1	R	Application Identifier for Prod. code
4	556	8	Special character	3	1	R	Application Identifier for Prod. code
5	581	5	Product code		4	R	Product code created in PLU edit
6	581	5	Product code		3	R	Product code created in PLU edit
7	581	5	Product code		2	R	Product code created in PLU edit
8	581	5	Product code		1	R	Product code created in PLU edit
9	556	8	Fixed digit	1	1	R	Application Identifier for Lot number
10	556	8	Fixed digit	0	1	R	Application Identifier for Lot number

Line Num	Par. Num	Index	Description	Type	Position	Direction	Explanation 1
11	581	6	Product code		4	R	Lot Number created in PLU edit
12	581	6	Product code		3	R	Lot Number created in PLU edit
13	581	6	Product code		2	R	Lot Number created in PLU edit
14	581	6	Product code		1	R	Lot Number created in PLU edit
15	556	8	Fixed digit	3	1	R	Application Identifier for weight 00,000
16	556	8	Fixed digit	1	1	R	Application Identifier for weight 00,000
17	556	8	Fixed digit	0	1	R	Application Identifier for weight 00,000
18	556	8	Fixed digit	3	1	R	Application Identifier for weight 00,000
19	17	0	Weight		6	R	Actual Weight
20	17	0	Weight		5	R	Actual Weight
21	17	0	Weight		4	R	Actual Weight
22	17	0	Weight		3	R	Actual Weight
23	17	0	Weight		2	R	Actual Weight
24	17	0	Weight		1	R	Actual Weight

4 Modify the label format associated with the PLU you will use for the Total Label.

Add the 128 bar code field

E.g. X = 30 y = 650 Width = 1 height = 150 turn = 0 Number of characters 16

The number of characters is calculated as follows:

So called Outside the frame digits count as 1

These are:

- | 556 | 8 | Special character | Č | 1 | R | Start symbol EAN128 C |

- | 556 | 8 | Special character | Γ | 1 | R | FNC1 Symbol |

And

- The Stop digit which you don't have to create in the Bar code table.
- The overall check digits that is created by the printer.

These last two digits are automatically generated by the printer so it is not necessary to shown then in the table.

The digits inside the frame are double density digits, because the white space in between the bars in the code also creates a digit when decoded, so the space occupied by two EAN 128 digits is equal to the space occupied by one EAN 13 digit.

So when creating a label format the calculation will be

1	Start Symbol
1	FNC 1 symbol
12	double density modules
1	Stop digit
1	Overall check digit

Total Number of digits | 16 |

Because the EAN128 is a double density code you should always ensure that there are an even number of digits to be printed.

Beware of a date in the code where the date is expressed without the leading zero in the days.

The code will be printed for all dates above the 9th but it will disappear at the beginning of the following month.

When you have created the label with the EAN 128 field you can now edit the appropriate PLU.

e.g. Edit PLU 50

1 Step down the entry until you come to **Barcode 128**.

2 Insert # 33.

3 You will now be prompted to enter 581 5 Product code _ _ _ _ which are the positions you created in the table.

4 Enter these figures and press return or red E key.

5 Next you will be prompted to enter 581 6 Lot number _ _ _ _ which are the positions you created in the table.

6 Enter these figures and press return or red E key.

7 Save the entries select the PLU and weigh a pack. Depending on which type of label you have positioned the EAN128 code, individual or Total, you will now see the longer code on the label.

Other tasks you may wish to undertake!

The texts associated with Parameter 581 5 may need to be changed to

581	5	Product code

The texts associated with Parameter 180 1 may need to be changed to

581	6	Lot Number

Example of the above:

Section 6
Servicing

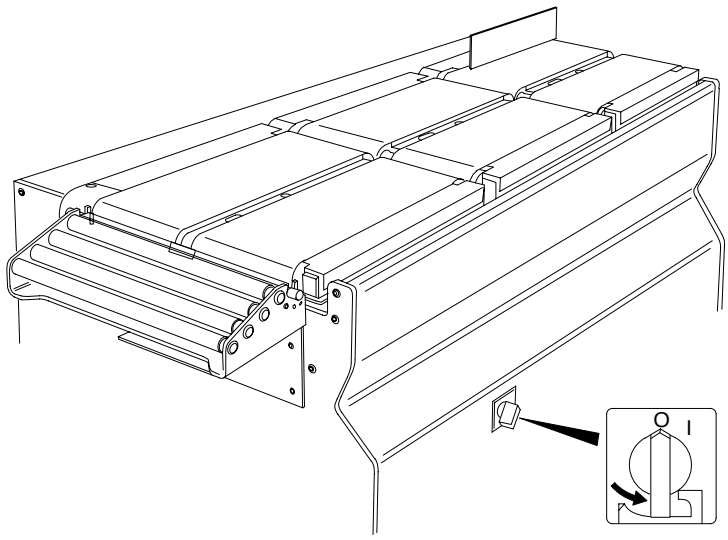
Table of Contents:

6.1 Cleaning the machine

Always switch off the machine before performing any cleaning or maintenance procedures.

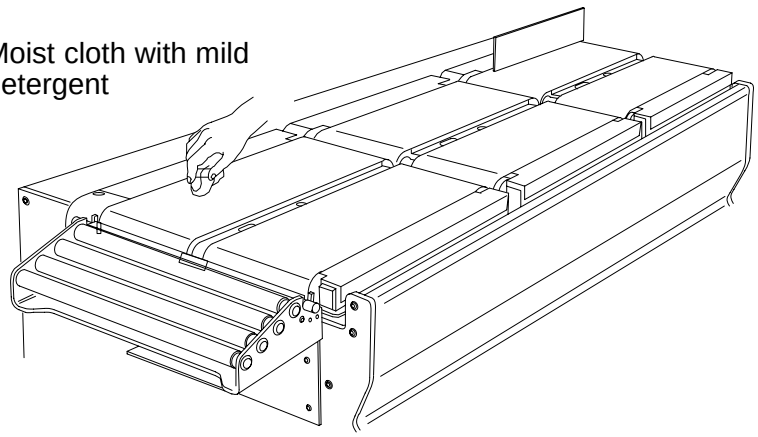
6.1.1 Cleaning conveyor belts

1

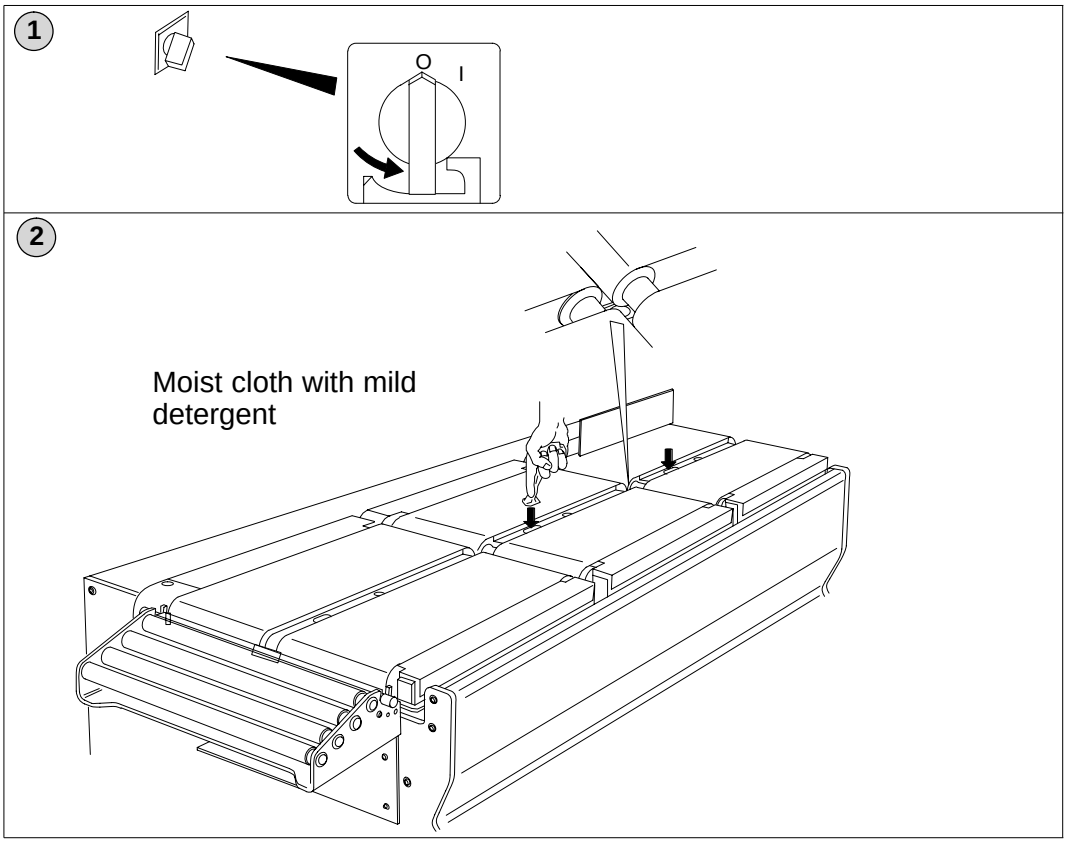


2

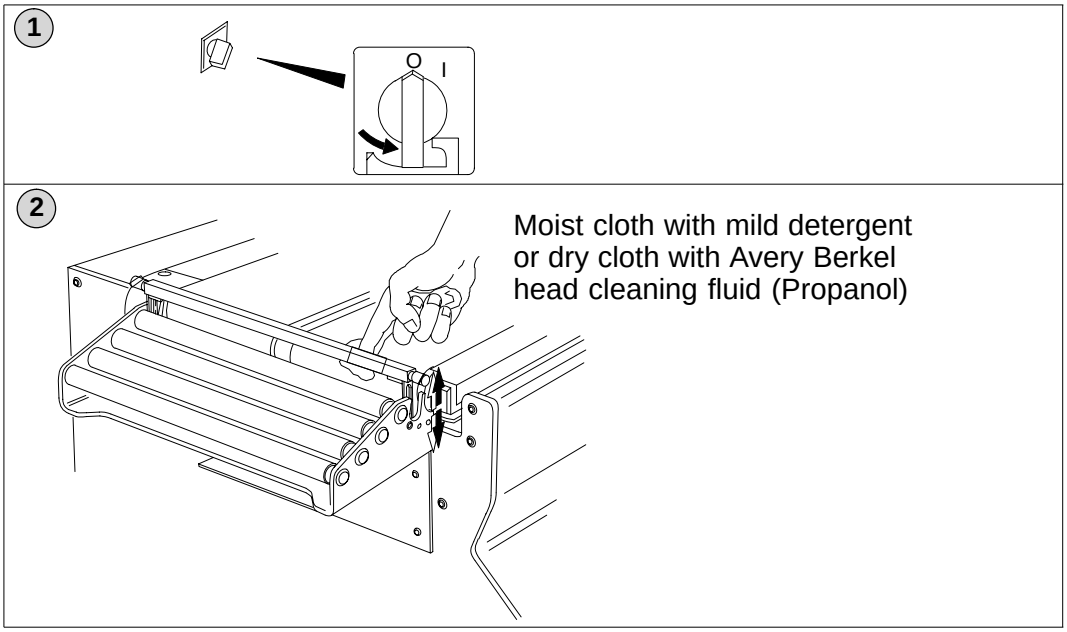
Moist cloth with mild detergent



6.1.2 Cleaning light cells

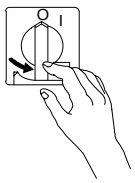


6.1.3 Cleaning label collect bar

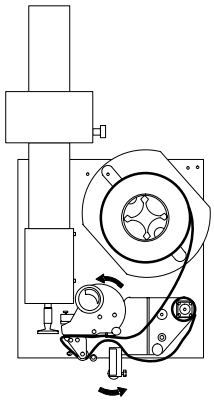


6.1.4 Cleaning print head

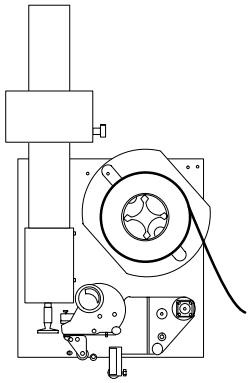
1



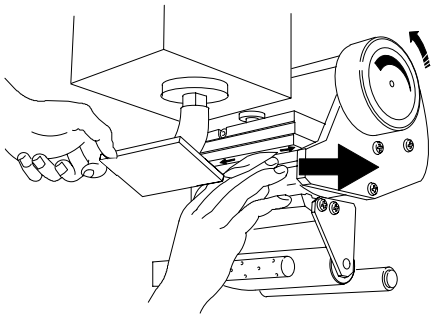
2



3



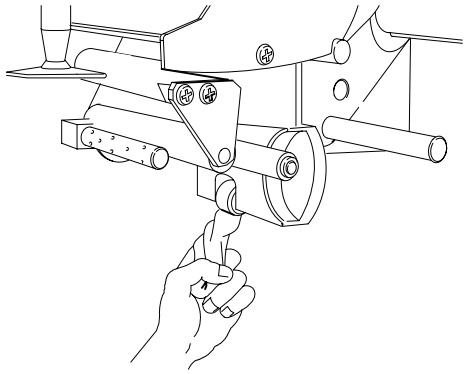
4



Wipe lint free cloth soaked in propanol across printhead to remove all waste adhesive.

6.1.5 Cleaning pressure roller

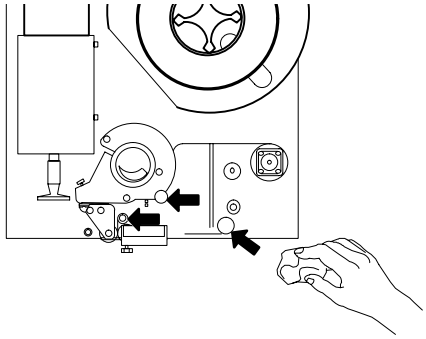
5



Wipe with a lint free cloth soaked in propanol to remove all waste adhesive.

6.1.6 Cleaning label guides

1

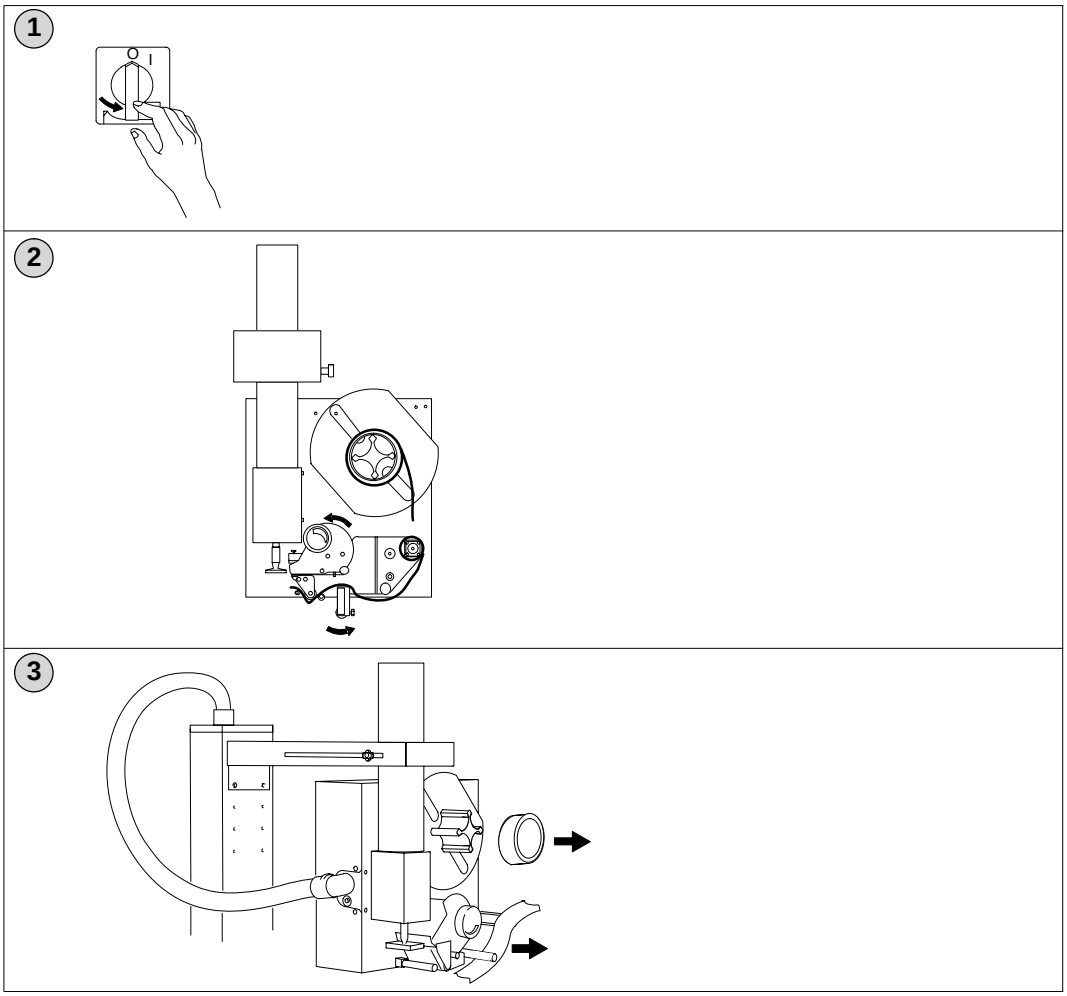


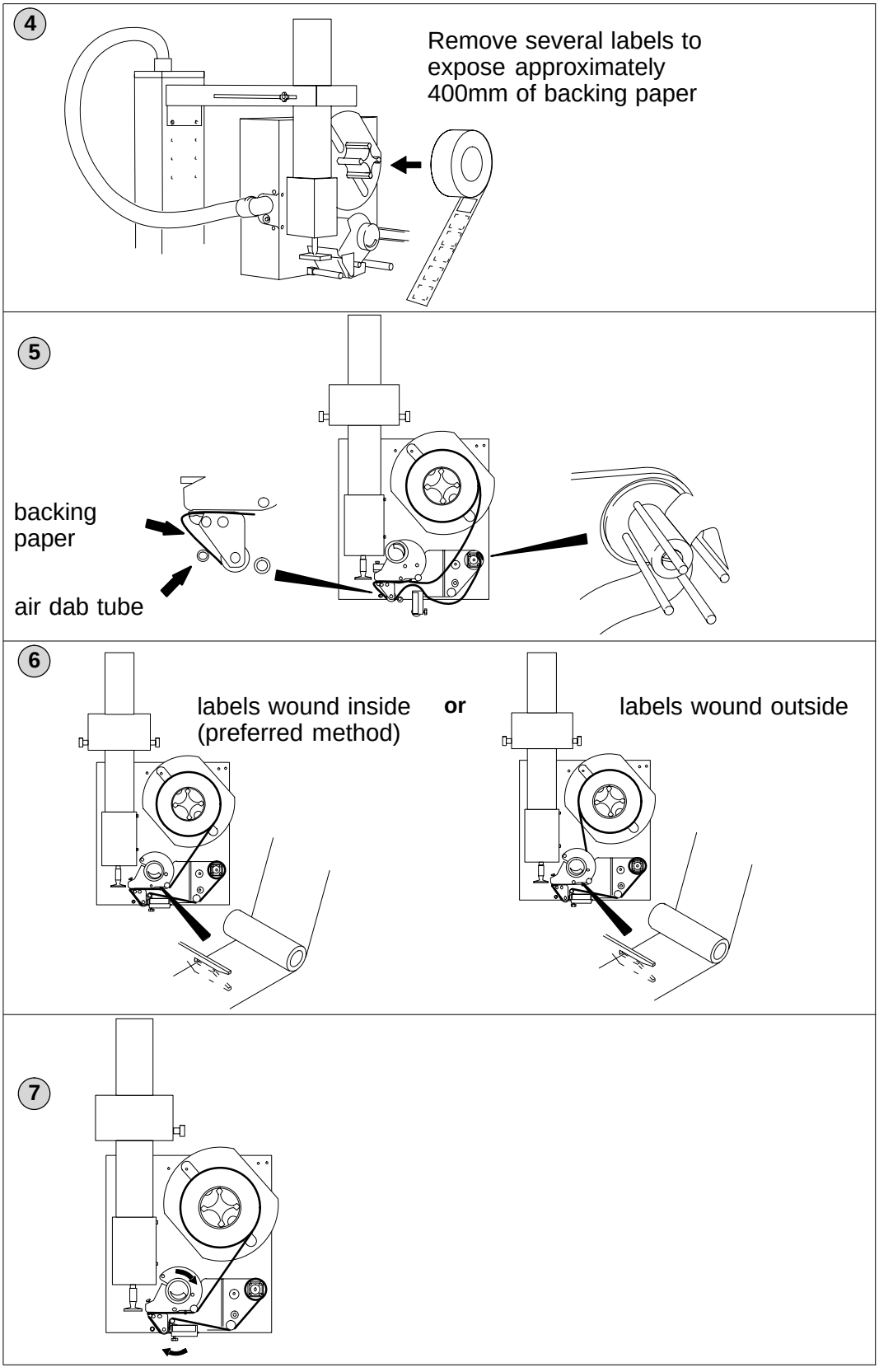
6.2 Replacement

6.2.1 Changing the label roll

Totals are lost when you switch off the machine. If you need to print the totals, make sure that there are sufficient labels left on the roll.

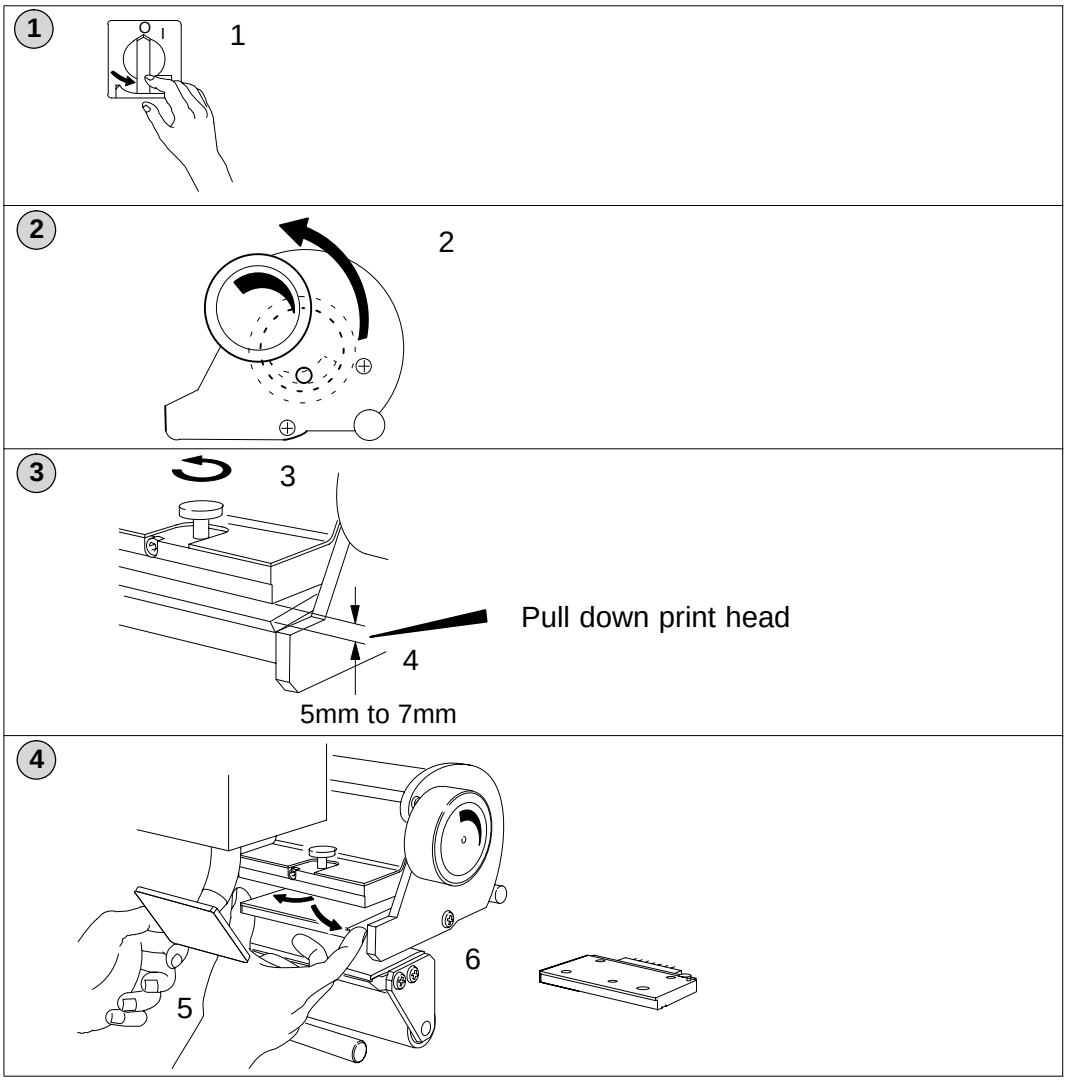
Caution:
If the machine is not switched off, the print head will be hot.




4
Remove several labels to expose approximately 400mm of backing paper
5
backing paper
air dab tube
6
labels wound inside (preferred method)
or
labels wound outside
7

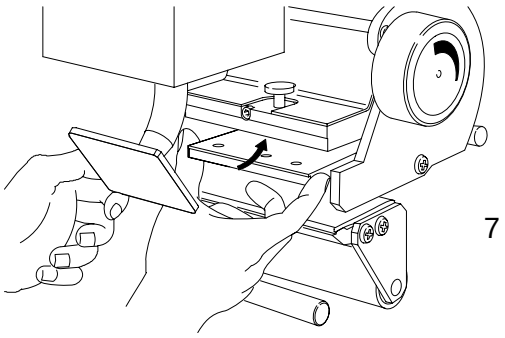
6.2.2 Changing the print head and felts

Removing print head

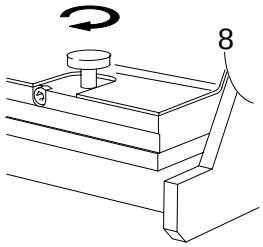


Replacing print head

5

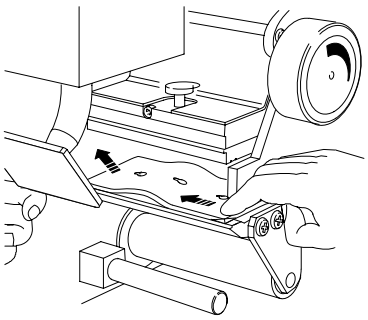


6

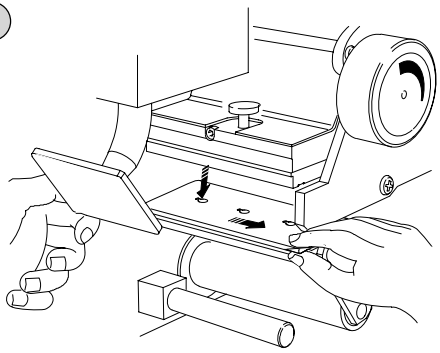


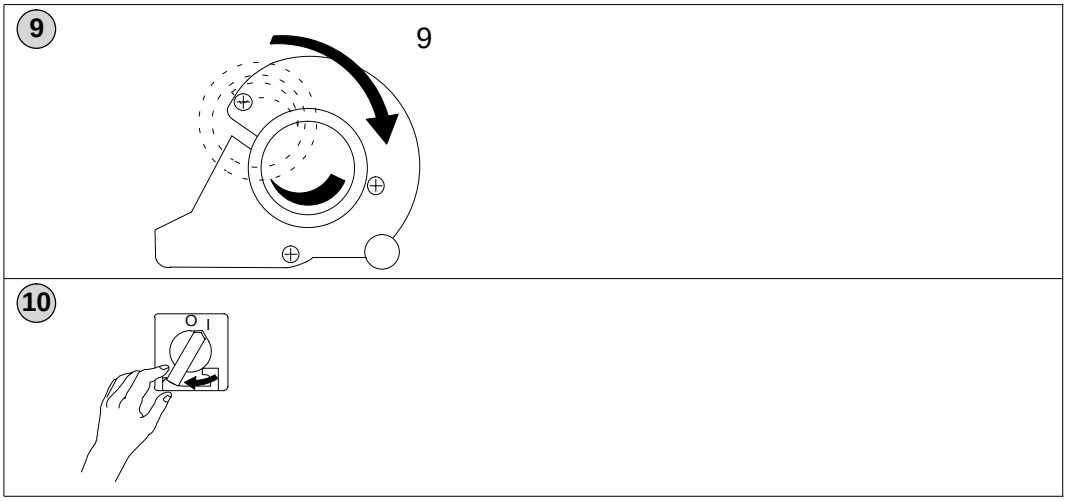
Changing the felt

7



8





6.2.3 Replacing the printer

If the printer unit is faulty and needs to be exchanged, remove it as follows:

1 Switch off.

2 Loosen the two 6 mm allen screws attaching the black top plate on the printer column and remove the plate.

3 Pull the cables and tubes out of the column and disconnect them, ensuring that the loose ends do not fall back into the column.

4 Unscrew the black knob screw on each side of the printer rail, and remove the caps at the end of the printer rail.

5 Pull the printer out of the rail.

6.2.4 Replacing the indicator unit

1 Switch off.

2 Loosen the 13 mm screw on the top of the indicator unit (do not remove the screw).

3 Pull the indicator unit out and disconnect the connector plugs at the rear of the unit.

6.2.5 Servicing the indicator unit

The Indicator Unit can also be positioned to allow access for service/replacement of internal parts.

1 Switch off.

2 Loosen the 13 mm screw on the top of the indicator unit (do not remove the screw).

3 Loosen the two screws located near the Floppy Drive at the side of the unit.

4 Pull the indicator unit out.

5 Turn the unit through 90 ^{o}, ending up with the rear of the unit towards the printer.

6 Push the unit back in towards the column.

7 Loosen the two screws on the bottom of the rear cover and the screw at the top of the rear cover.

8 Remove the rear cover.

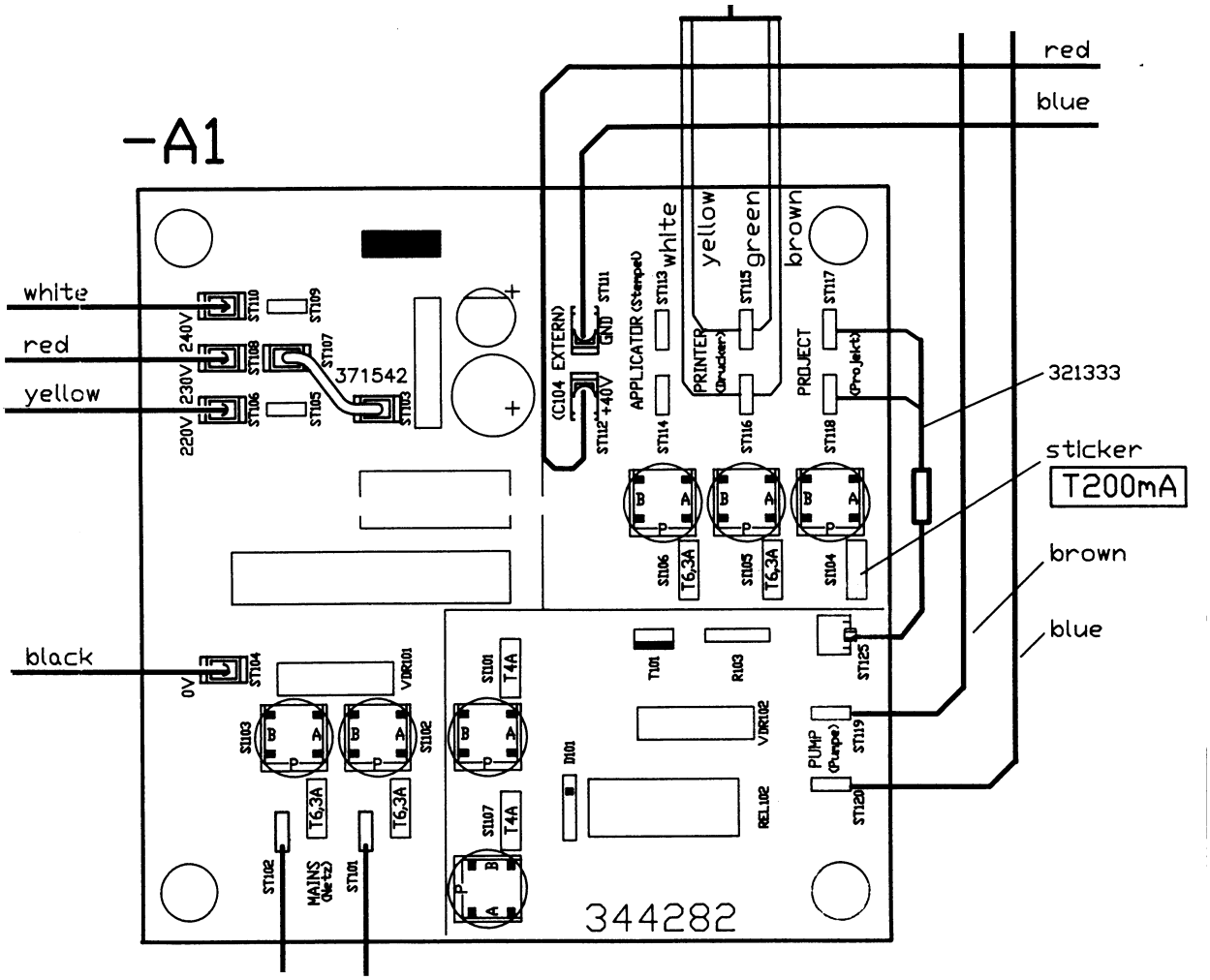
6.2.6 Replacing the fuses

The electronic components are located in a separate box under the conveyors, behind the front plate. To remove the front plate:

1 Loosen the knob screws located underneath the front plate, then lift the front plate up and remove it.

2 Open the electronic box by removing the two screws located on the top of the box.

3 The main fuses are located in black cylindrical holders on the left hand PCB. The conveyor motor fuses are located in black cylindrical holders on the right hand PCB.



6.2.7 Replacing the printer/applicator unit filters

The applicator works with compressed air and a vacuum. To prevent dust entering the two valves, there are two filters located in the applicator system. To replace/clean these filters remove the yellow caps at the rear of the printer.

Caution:

Make sure that these filters are replaced and that the yellow caps are tightly secured before operating the applicator.

6.3 Adjustments

6.3.1 Adjustment of the printer/applicator unit

The printer/applicator is positioned within a rail to enable it to be moved across the labelling conveyor. To move the unit unscrew the black knob screws on each side of the rail and move the printer to the desired position. Tighten the screws when the required position is attained.

The unit can also be turned through 180^{o} in 45^{o} steps. Lift the black knob/latch on the top of the rail, which will allow the printer to be turned. The knob/latch will slot back in every 45^{o}.

6.3.2 Adjustment of belt tension

The tension of the belts strongly influences friction within the conveyor system.

On the right hand side of the conveyor is the main spindle, adjustable via two nuts. To make sure that the friction of the conveyor is not too high, measure the current of the motor when adjusting the tension of the belts. The current must not exceed 0.7 – 0.8 A, when measured without any load and at room temperature.

6.3.3 Extension of conveyors to accommodate long packs

The B806 System is designed for pack lengths of 80 – 250 mm. By repositioning the Labelling and In–feed conveyors it can accommodate packs up to 500 mm in length. These conveyors can be repositioned by two steps of 30 mm each, as follows:

NOTE: *If the B806 is equipped with a roller system, remove the upper part of the roller system.*

1 Loosen the allen screws, accessible through a hole in the top, on each side of the conveyor. The conveyor can then be moved upwards.

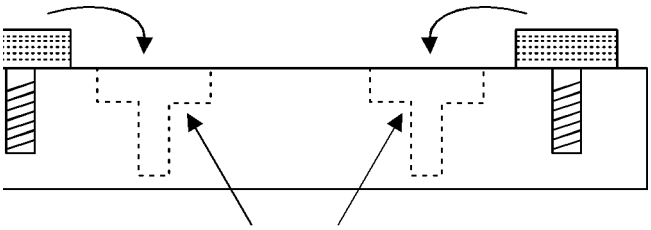
2 Move the conveyor to one of the two possible extension points.

3 Tighten the allen screws.

4 Replace the roller system, if fitted.

To ensure that the long packs are only in contact with the scale during weighing, the weighing conveyor should be 5 mm higher than the other conveyors.

The Labelling and Infeed conveyor can be set down by 5 mm by repositioning the screws which attach the conveyor into the cavities in the plate.



CAVITY

ASSEMBLY PLATE FOR LABELLING AND INFEED CONVEYORS

6.3.4 Re–calibration of scale

The scale can be re–calibrated if the accuracy has been affected due to load violation of the maximum range or simply due to prolonged use.

NOTE: *Before calibrating, ensure that the machine is level with all four levelling feet in contact with the floor and with the load evenly distributed.*

Ensure you have sufficient accurate test weights before starting calibration. You will need to calibrate at each of the following points: 500g; 1Kg; 3Kg; 6Kg; 8Kg.

You will also need a calibration 'pin', 2cm long and 2mm diameter.

1 Switch off the B806.

2 Remove the front cover plate (see section 6.2.6 page 6–12)

3 Clear any debris from on or around the weighcell unit.

4 Insert the calibration pin into the aperture (marked X5) on the weighcell unit. The aperture contains two contact strips that are bridged by the calibration pin.

NOTE: *On right to left hand machines the X5 aperture is in the bottom right hand side of the weighcell. On left to right hand machines the X5 aperture is in the bottom rear left hand side of the weighcell.*

5 Switch on the B806.

NOTE: *If you see the normal weight display after switching on, the calibration pin is not making contact correctly. Repeat from step 1 checking that the pin is the correct diameter and is clean.*

6 Press Y .

7 Choose the calibration mode from the menu on the indicator display then follow the instructions displayed.

The scale type is **18**.

The scale number/scale address is **33**. **Do not change this number.**

8 Remove the test weights.

9 Switch off the B806.

10 Remove the calibration pin.

11 Replace the front cover.

6.4 Common faults and remedies

6.4.1 No weight display

The machine has been unable to carry out self test – If left in manual for long periods during programming with weight on platform – remedy switch off/on to Reset.

6.4.2 Corruption of display

Replacing the main board can cause a fault where the information appearing in the top half of the display is duplicated in the lower half of the display.
e.g. The Avery Berkel logo bar located at the top of the screen is repeated at the centre of the screen.

If this fault occurs, carry out the following procedure.

1 Ensure you have back up disks for all the system **and** data files.

2 Switch off the machine using the ON/OFF switch located on the machine.

3 Hold down the keys F8, E and Del and switch on the machine.

4 When you see the display '**INSERT DISC**' switch off the machine.

5 Wait 20 seconds to ensure the power supplies are drained.

6 Hold down the red E key, switch on the machine then wait 5 seconds and release the red E key. The display will go blank.

7 Press F10. A column of numbers will appear down the left hand side of the display.

8 Press ReWrap until two asterisks (**) appear next to '112'. This should be somewhere near the centre of the display.

9 Press F2 until you see '**DISPLAY–TYP:NEW(SHARP)**' in the top line of the display.

10 Hold down Del for 5 seconds. Display will show '**INSERT DISC**'.

11 Switch off the machine and wait 20 seconds.

12 Switch on the machine. Display will show '**INSERT DISC**'.

13 Insert the system disk and load the system files.

14 Restore the data files.

6.4.3 No label application

Check that Vacuum/Compression pump operates and that communication exists between the control and the applicator by doing the following test.

1 Switch off the B806.

2 Manually pull the applicator down to rest on the labelling conveyor.

3 Switch on the B806.

a After a few seconds pump should run.

b Compressed air should be switched to lower side of applicator piston.

c Applicator should return to upper position.

d Air blowing from applicator foot indicates problem with valve pin (414484).

e If pump does not run, measure voltage at pump. Lack of voltage indicates problems with applicator control PCB's part numbers E– 344 – 590 or E– 344 – 690.

f If pump runs the problem is with the solenoid valves.

g If the applicator operates slowly or does not lift completely, check the condition of the in-line air filters (two adjacent to the pump and two on the printer rear cover). Also check condition of the exhaust silencers on the top of the applicator cylinder and on the solenoid valve block.
Check for security and condition of air lines as a small leak can have a major effect.

6.4.4 Poor label application

Labels missed intermittently

1 Check condition of labels (must be inside wound, see page 6–8, with front edge leading).

2 Check operation of non–return valve in applicator foot.

3 Check position of label with reference to dispense edge on printer. The trailing edge of the label should hinge on the backing paper as the air tube blows the label upwards on to the applicator foot. Adjust the label gap setting (within the printer setting menu 4 sub menu 5) to correct this. If this does not correct the problem measure the label length and check this against the label map – ensure the entered label length does not exceed the actual length of the label.

6.4.5 Changing conveyor belts

It is recommended that the belts are always changed as a pair, as it may not be possible to align the tracking of a new belt against the old one.

If you have difficulty in getting the belts aligned, you may correct this by re-fitting one of the belts so that the direction of travel of that belt is reversed.

6.5 Error messages

Message	Action
Clear scale	Check that there is no weight on the conveyor. Clean the conveyors if necessary to remove any debris. If the display still does not show zero, switch off machine, wait 30 seconds and then switch on again.
Paper error	Label roll finished. Load new roll and press Del . Label strip runs out of light barrier. Check paper feed. Paper roll too wide. Replace with correct width roll. Label intervals of 4mm not observed. Enter correct label gap in PRINTER SETTING. Wrong label length in program. Change length in the label format used. Label light barrier not clean. Remove dirt, bits of label etc using Berkel cleaner.
Unit locks	If the display freezes switch off power to machine. Wait 30 seconds and switch on again. The error was probably due to incompatibility between the PLU data and the label format or programming errors.
Data loss	If the problem is a serious one, the RAM storage may be deleted and you will have to reload the system and product data.
If you are unable to solve the problem, contact Avery Berkel centre.	

6.6 Fault finding and quick tips

6.6.1 To change default format for date printing

Generally the B806 will be default programmed to print Day, Day, Month, Month, Year, Year set as TT. MM. JJ.

This may be changed to e.g. MM, TT, JJ. for the USA.

To change, alter the format of Parameter 570.3 to 0: MM. TT. YY

Other changes may be made depending on the customer requirement.

See Date Settings in the Operator Manual.

Default print format of time

This may also be altered to hide the true content of the data, e.g. current default setting is HH. MM. SS.; to change, alter parameter 570 – 4.

Operator prompts

The operator prompts may be repositioned by altering parameter 900.01.

Currently the default is 300 pixels by 200 pixels, which defines the mid point of the messages. The first value is the X co-ordinate; Y is the second co-ordinate.

Weigh test mode

To change the system to test weight mode, change parameter 570 – 2 to D instead of W. Switch OFF and ON to implement change.

The B806 will not produce tickets in this mode. When the weight examination is complete, change the ‘Description’ back to W and switch OFF and ON to implement the change.

To print time, insert parameter 2 – 0 in the print definition list and the appropriate label format.

Changing the default country code setting

If the default country is incorrect, alter parameter number 555,0. ‘Description’ to the Ref number of the country code required,

e.g. 6 for the UK

9 for USA etc

To change the message displayed at switch on, alter the ‘Description’ entry of parameter number 524 – 1 to 524 – 4.

Changing the display of PLU text lines

To change, the default is line 100.1 and 100.2 – first 2 lines of PLU

Enter different par values at 570 – 28.

6.6.2 Useful key functions

PLU create/edit: moves cursor up or down

Pre–pack mode: increases or decreases applicator force. (PLU selected)

Label design: moves cursor up or down one line with CAP selected, moves cursor up or down five lines.

F6 **PLU create/edit**

Copying a PLU.

1 Press F3 .

2 Press F6 x 2 display shows COPY? yes = 1 No = 0

3 Press 1 .

4 Enter new PLU number.

5 Press F6 .

F9 **Auto search:** using line 1 of the PLU description.

6.7 Recovering from disaster

Only use the delete and re–boot option if there is no other way of reinstating the operating system.

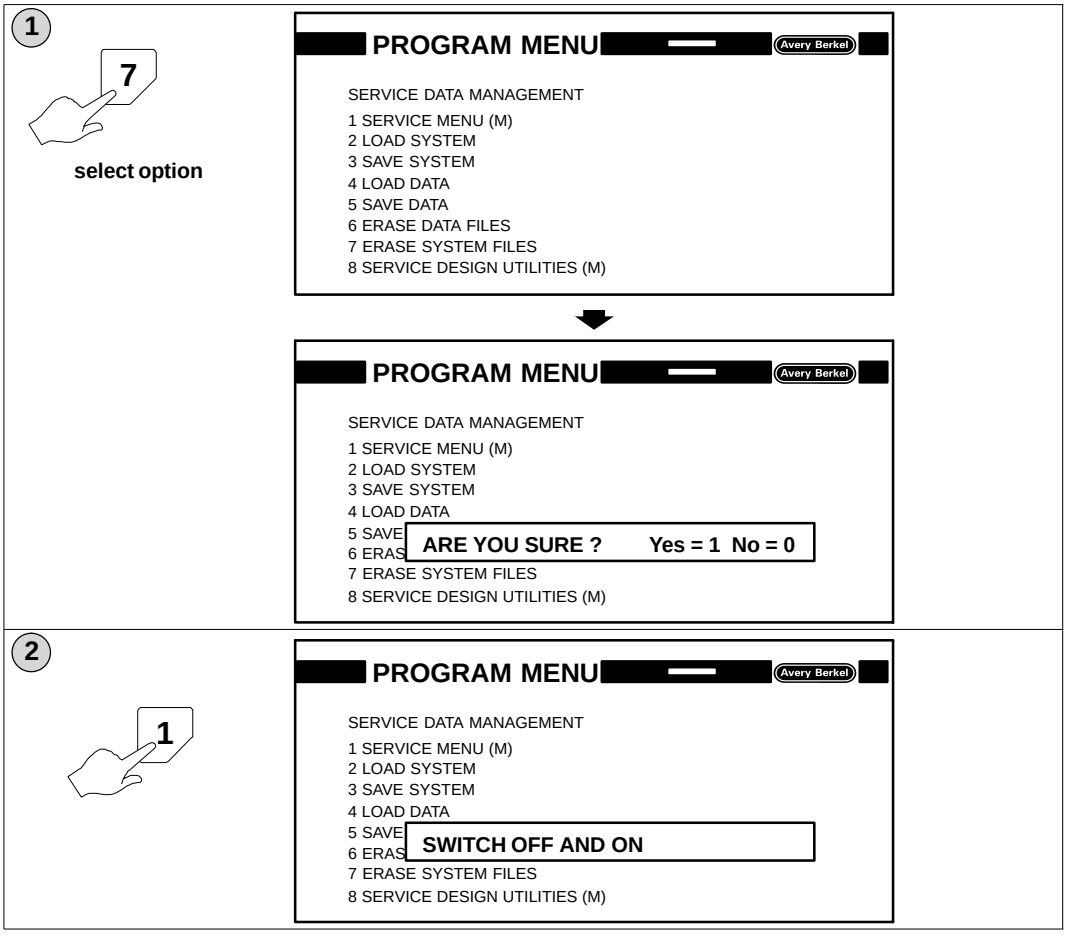
If the system files have become corrupted or you need to load a new operating program try loading the system files from disk before you resort to this procedure (see section 5.12, Data transfer).

6.7.1 Deleting the operating system

Before deleting the operating program (system files), make sure that you have the disk with the new operating program available.

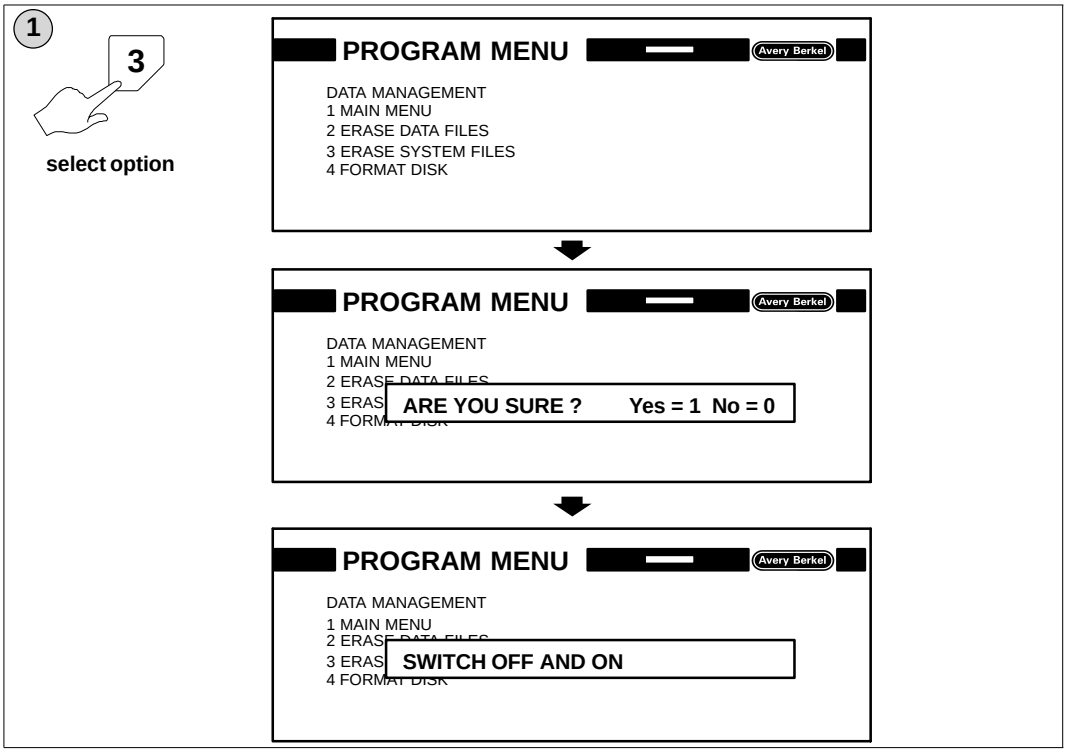
This option may be password protected.

Programming and service menu route



If you press 1 deleting the operating system will begin immediately.

Operator menu route

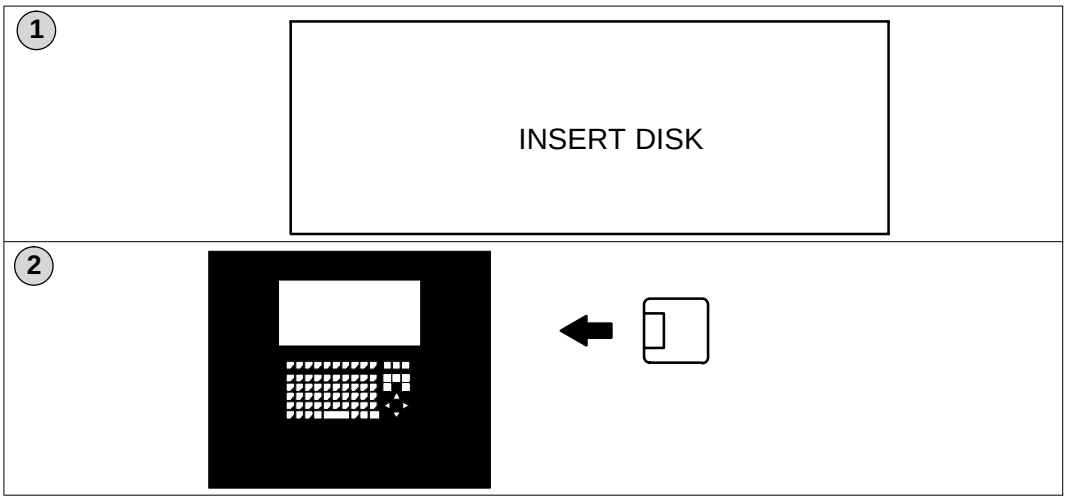


If you press **1** deleting the system files will begin immediately.

When all the operating system has been deleted (no menu on screen) you must switch off the machine for at least 20 seconds.

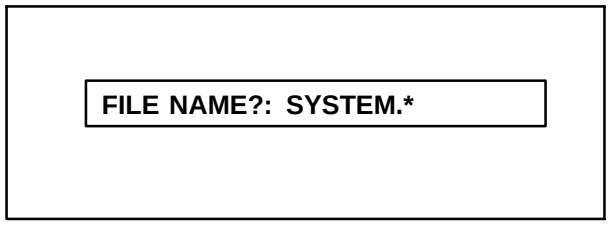
You may now switch on the machine and load the operating system from disk.

6.7.2 Loading operating system from disk



3

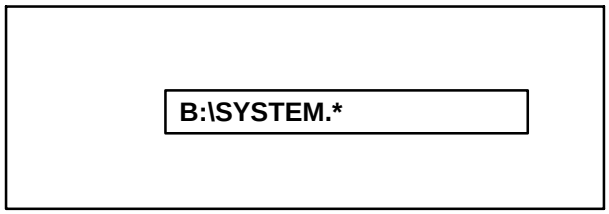
(red key)



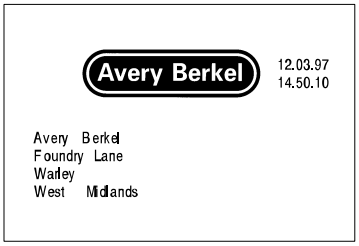
The default file name is SYSTEM. Enter the file name that corresponds to the file names on the disk.

4

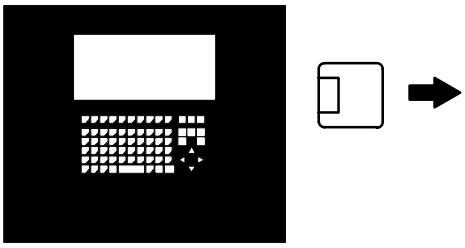
(red key)



5

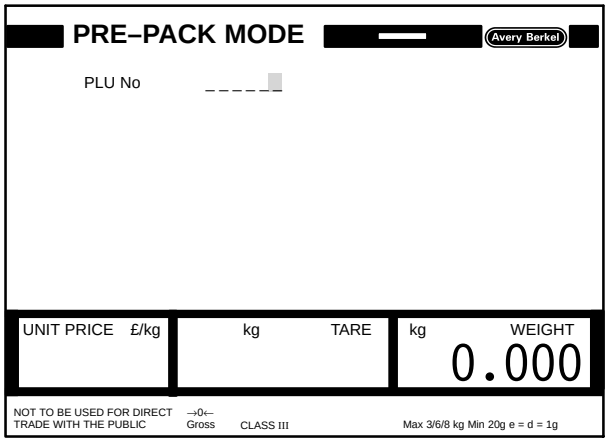


6



7

Press any key.
The machine will take approximately 45 secs to initialise and find zero.



8

Go to Operator menu and load data files from data backup disk if necessary.

Section 7
Appendices

Table of Contents:

7.1 Introduction

This defines the Standard default setting for the B806.

It is intended that all of the production B806 Weigh Price Labellers will be loaded with these default settings.

The B806 may have additional functions added to meet territory and customer demands, however these changes will not automatically be added to the default settings. These changes must be recorded and backed up, either by the engineers who perform the changes or the Territory department responsible for the for storing the information.

As the product matures then the default settings will be amended to reflect any generic changes.

7.2 Standard set–up

7.2.1 Parameter list

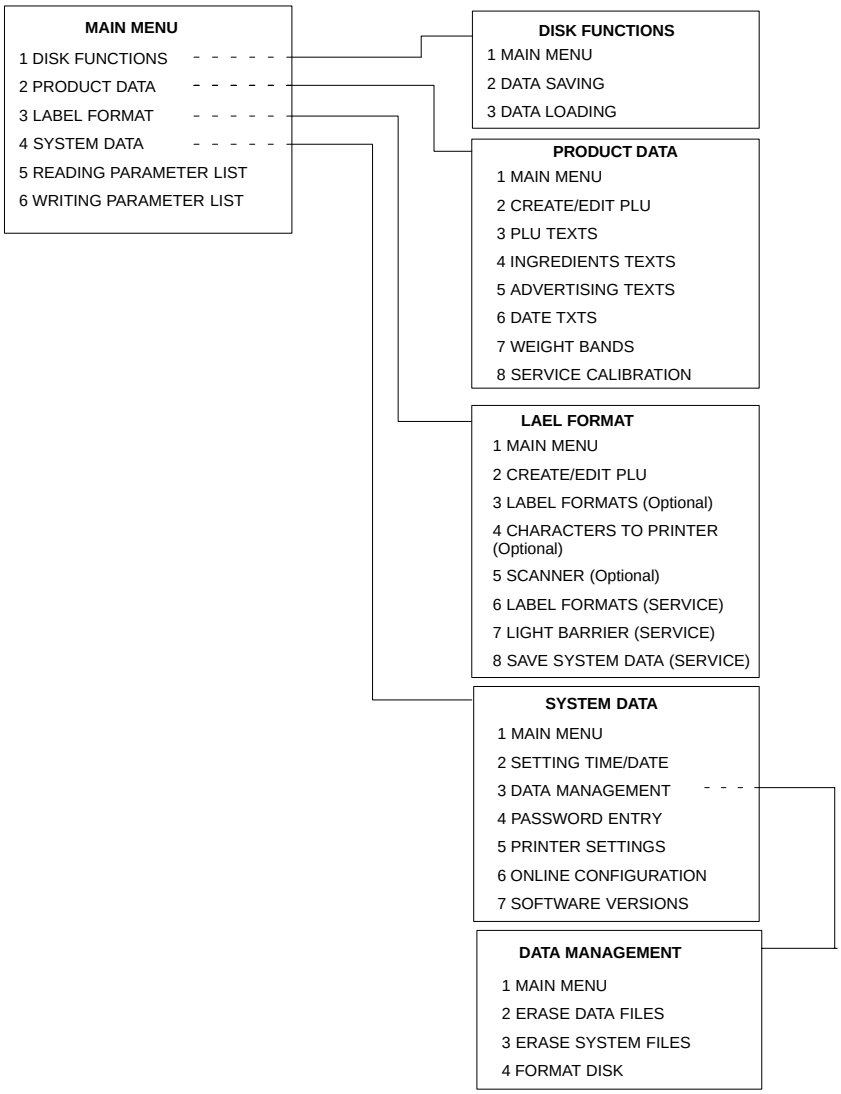
See Parameter list Para_D1.xls.

7.2.2 Screen texts

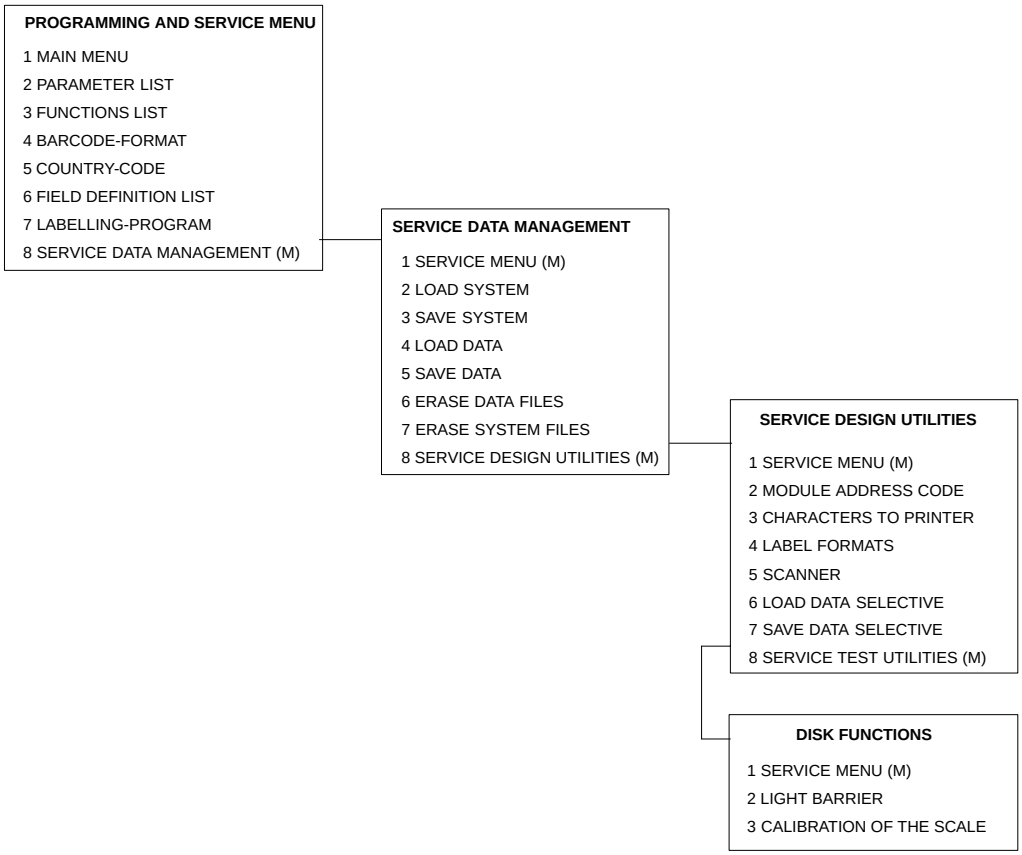
See Parameter list Para_D1.xls.

The screen text are annotated with a ‘T’.

7.2.3 Customer menus



7.2.4 Programming menus



7.2.5 Service password options

Four special service options will be available under service password control.

These options will be inserted into the Customer Menu and will only be accessible if the correct password is entered.

The passwords will not be displayed in the ‘Password Entry’ option in the System Menu.

The secret password will be issued during service training.

Calibration

Calibration is option 8 in the Product Data Menu.

The calibration routine is additionally protected by the use of a special calibration pin which must be inserted into the Load Cell. The action of inserting the pin destroys the Weight and Measures Seal which obscures the access hole. Once calibration is complete the local W + M inspectors should be invited to re–test the system and seal the aperture.

Label format creation

Label format creation is option 6 in the Label Layout Menu.

This option enables the engineer to create or edit label formats. The engineer must work with the existing Field Definition List within the machine.

Service light barriers

The light barrier operating thresholds can be adjusted through option 7 in the Label Layout Menu.

This feature enables the engineer to adjust the level at which the photocell, which form the light barriers, switch.

This feature may be important if the customer moves the B806 to a different location where the ambient light level differs from the original location.

System file save

System File Save is option 8 in the Label Layout Menu.

This function will enable the engineer to save the customers system data before he starts any repair or maintenance work on the B806.

Setting the password

To create the service passwords the appropriate option number and the parameter P1 must be inserted in the menu line.

e.g. Calibration is in the Product Data Menu and will be set up as follows:

Para.	Index	Description
560	0	M0,16,40,2,15,23,64,43.P1;Product Data

Label formats, light barriers and Save System data are in the Label Layout Menu

Para.	Index	Description
561	0	M0,16,00,00,00,3.P1,55.P1,35.P1;Label layouts

Where P1 denotes that a secret password 1 is to be used.

This password is located in parameter 496 index 1 in the selection side of the Parameter List.

Other secret passwords can be created and assigned to parameter 496 index 2 etc. and be inserted in the menu as P2.

To aid recall the service password P1 will be AB9381.

If this password becomes public domain then it will be changed to ensure we comply with the Weight and Measures regulations.

7.2.6 Labelling programs

Common labelling program 1

Base mode 1					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
2	58	2	Take next function	———————	0.00
3	89	1	Logo to printer	———————	1
4	102	0	Sort type number	F	0
5	60	0	PLU number	———————	0
6	95	0	Use Labelling program number	———————	10

Labelling program 10, totals enable

Labelling Program 10					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	55	1	Enable total 1		1
2	55	2	Enable total 2		2
3	55	3	Enable total 3		3
4	55	4	Enable total 4		1
5	55	5	Enable total 5		1
6	96	50	Standard Labelling Program		0
7					
8					
9					
10					

The value column indicates how many labels will be printed when the total button is pressed or the pre–set achieved.

The Standard Labelling Program contains the Special Mode 1 which includes Quick price change, Minus, Pre–sets, label position, Applicator force, Function Key settings.

Labelling program 11

Operator permitted to enter Unit Price and Tare. Both values stored.

Labelling Program 11					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	62	0	Unit price	#	0
2	63	0	Tare	#	0
3	3	5	Return to previous menu		0

Labelling program 12

Operator permitted to enter Unit Price and Tare. Values NOT stored.

Labelling Program 12					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	62	0	Unit price		0
2	63	0	Tare		0
3	3	5	Return to previous menu		0

Labelling program 14

Operator permitted to enter Unit Price and Tare. Both values stored.

Operator permitted to define the number of packs required to fill a box and the number of boxes to fill a pallet. The defined value will not be stored when the PLU is Cleared.

Labelling Program 14					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	62	0	Unit price	#	0
2	63	0	Tare	#	0
3	80	2	Pre–set packs in a box		
4	80	4	Pre–set of boxes on a pallet		
5	3	5	Return to previous menu		0

Labelling program 15

Operator permitted to enter Unit Price and Tare. Both values stored.
Operator permitted to define the number of packs required to fill a box and the number of boxes to fill a pallet. The defined value will not be stored when the PLU is Cleared.

The display will indicate:

The number of packs in the box and their accumulated weight.

The number of boxes packed

Labelling Program 15					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	62	0	Unit price	#	0
2	63	0	Tare	#	0
3	80	2	Pre–set packs in a box		
4	80	4	Pre–set of boxes on a pallet		
5	81	2	Display accumulated of packs in a box		
6	81	1	Display accumulated weight of packs in a box		
7	81	4	Display the number of boxes packed		
8	3	5	Return to previous menu		0

Labelling program 41

The Sort function uses the weight of the pack to define the methods of labelling. When the Sort function is invoked the two weight limits may be defined when the PLU is created. The first weight limit will be the Lower Limit and the second limit will be the Upper weight limit.

In Sort Type 1 if the weight of the pack falls between the lower and upper limit then labelling will be inhibited. Packs below the lower limit weight or above the upper limit will be labelled using the data contained within the PLU. The following table defines how the other Sort Types operate.

Value (Type of sorting)	**Input** during PLU Create/Edit	**Labelling** under lower weight limit	**Labelling** weight between lower and upper weight limit	**Labelling** above upper weight limit
1	Lowest weight Lowest weight	Yes (normal)	No	Yes (normal)
2	Highest weight- Highest weight	No	Yes (normal)	No
3	Highest weight- Highest weight	No	Yes (fix weight)	No
4	Highest weight- Highest weight Fix weight	Yes (normal)	Yes (fix weight)	Yes (normal)

Example:

Type of sort number: 4
Lower weight limit: 0.995 kg
Upper weight limit: 1.005 kg
Packages up to 0.995 kg and over 1.005 kg will be labelled as normal

Packages with weights in between the lower and upper weight limits will be labelled as a fixed weight item with a nominal printed weight of 1.000 kg. (entered during PLU Create/Edit)

Labelling program 41

Labelling Program 41					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	102	0	Sort type number		1
2	3	5	Return to previous menu		0
3					
4					
5					

Labelling program 42

Labelling Program 41					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	102	0	Sort type number		2
2	3	5	Return to previous menu		0
3					
4					
5					

Labelling program 43

Labelling Program 43					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	102	0	Sort type number		3
2	3	5	Return to previous menu		0
3					
4					
5					

Labelling program 44

Labelling Program 44					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	102	0	Sort type number		4
2	3	5	Return to previous menu		0
3					
4					
5					

Entering **F** in the attribute column fixes the value so that the operator can view the value but cannot change it.

Standard labelling program 50

Labelling Program 50					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	3	1	Special Mode 1		0
2	90	53	Branch if numeric to		18
3	90	6	Branch if Key x to	F1	20
4	90	6	Branch if Key x to	F2	22
5	90	6	Branch if Key x to	F3	24
6	90	6	Branch if Key x to	#	16
7	90	5	Branch if Key F to	F	21
8	90	6	Branch if Key x to	F4	26
9	90	6	Branch if Key x to	F5	28
10	90	6	Branch if Key x to	F6	30
11	90	6	Branch if Key x to	→	32
12	90	6	Branch if Key x to	←	34
13	90	6	Branch if Key x to	↑	36
14	90	6	Branch if Key x to	↓	38
15	90	0	Branch always to		1
16	96	104	Minus		0
17	90	0	Branch always to		1
18	3	2	Repeat last key		0
19	3	3	Return to start		0
20	96	105	Fast data input		0
21	3	3	Return to start		0
22	96	108	Pusher (machine)	#	0
23	90	0	Branch always to		1
24	96	109	Pusher article	#	0
25	90	0	Branch always to		1
26	151	0	Automatic		0
27	90	0	Branch always to		1
28	151	1	Manual		0
29	90	0	Branch always to		1
30	151	2	Transport		0
31	90	0	Branch always to		1
32	124	3	Label Position (+)		1
33	90	0	Branch always to		1
34	124	4	Label Position (–)		1
35	90	0	Branch always to		1
36	122	5	Applicator force +		1
37	90	0	Branch always to		1
38	122	6	Applicator force –		1
39	90	0	Branch always to		1
40	58	0	Transmit to host		899.04
41	90	0	Branch always to		1

Labelling program 104, subroutine for minus / non add function

Labelling Program 104					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	200	0	Operator information		900.03
2	90	6	Branch if key x to	1	4
3	90	6	Branch if key x to	0	5
4	4	0	Minus		0
5	3	5	Return to previous menu		0

Labelling program 105, fast data input

Labelling Program 105					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	88	4	Password		98
2	95	1	Ignore Operating Mode		0
3	68	0	Renew screen		0
4	3	2	Repeat last key		0
5	60	0	PLU number		11
6	90	5	Branch if Key F to		0
7	62	0	Unit Price	#	0
8	63	0	Tare	#	2
9	90	0	Branch always to		0
10	3	3	Return to start		
11	200	0	Operator Information		553.07

Labelling program 108, saving applicator setting to the machine

Labelling Program 108					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	122	2	Applicator Force	#	0
2	124	2	Label Position / machine	#	0
3	3	5	Return to previous Menu		0
4					

Labelling program 109, saving applicator settings to the PLU

Labelling Program 109					
Line	**Code**	**Sub code**	**Description**	**Attribute**	**Value**
1	122	1	Applicator Force	#	0
2	124	1	Label position / PLU	#	0
3	3	5	Return to previous Menu		0
4					

7.2.7 Field definition lists

The B806 will be delivered with 4 default Field Definition lists.

The Field Definition List 1 will be used as the default list for standard PLUs.

Field definition list 1

Number	Index	Description	Attribute	Format	Symbol
100	1	PLU text 1st line	a		0
100	to 10	PLU text 10th line	a		0
519	1	Ingredient text 1st line	a		0
519	to 6	Ingredient text 6th line	a		0
571	1	Date text 1st Line	a		0
571	2	Date life text 2nd line	a		0
504	1	Fixed text 1st line	—		0
504	to 3	Fixed text 3rd line	—		0
30	0	System date	—		0
32	0	Time	—		0
33	0	Date 1	a		0
34	0	Date 2	a		0
35	0	Date 3	a		0
12	0	Pagination number	—		0
8	0	Unit Price	—		0
24	0	Unit Price Symbol			0
11	0	Net Weight Kg/lb.			0
22	0	Weight Symbol			0
102	0	Weight Range Mode	v	1.0	0
99	0	Lower weight limit	v	6.3	0
99	1	Upper weight limit	v	6.3	0
99	2	Fixed Weight.....	v	6.3	0
21	0	Pack Price			0
23	0	Price Symbol			0
91	0	Country code	v		0
54	0	Labelling type	v		0
36	0	Barcode EAN 8	k		0
37	0	Barcode EAN 13	k		0
48	0	Barcode EAN 128	k		0
581	2	Article number	—		0
581	1	Flag number	—		0
522	1	Advertising text	k		0
522	to 3	Advertising text	k		0
95	0	Labelling Program number	v	3.0	0
9	1	PLU used to print total 1	v	6.0	0
9	2	PLU used to print total 2	v	6.0	0

Number	Index	Description	Attribute	Format	Symbol
9	3	PLU used to print total 3	v	6.0	0
9	5	PLU used to print total 5	v	6.0	0
150	0	Product group number	v	4.0	0
124	0	Label position (1–255)	v	3.0	0
122	0	Applicator force (1 –255)	v	3.0	0
126	4	Conveyor Stop.(0–3)	v	1.0	0
123	3	Conveyor speed (0–2)	v	1.0	0
70	0	Print of packet * 1			0
71	0	Print weight of * 1kg/lb.			0
22	1	Total Weight Symbol. kg/lb.			0
72	0	Print Price *1			0
23	1	Total Price Symbol			0
73	0	Print of packet *2			0
74	0	Print Weight *2 kg/lb.			0
75	0	Print Price *2			0
76	0	Print of packet *3			0
77	0	Print Weight *3 kg/lb.			0
78	0	Print Price *3			0
86	0	Print of packet *4			0
85	0	Print Price *4			0
84	0	Print weight *4			0
504	80	Fix text: NO	—		0
504	81	Fix text: *1*	—		0
504	82	Fix text: *2*	—		0
504	83	Fix text: *3*	—		0
504	84	Fix text: TOTAL	—		0
504	85	Fix text: *4*	—		0

The Field Definition List shows which fields may be used for the design of the label format.

The remarks under attribute mean:

— Data will automatically be added by the program. These fields will not be displayed during the PLU Create/Edit process.

Texts for fix texts fields must be entered when the label formats are designed (key F8).

a Field belongs to the PLU section of the data entry (PLU number)

k Field belongs to Customer section of the data entry

V Entry of additional data in the PLU section of the data entry

v Entry of addition data in the Customer section of the data entry in (e.g. PLU number for total 1). These values will not be displayed to the operator

Total 4 information may be printed on continuous thermal paper or individual labels.

If the report is required on continuous paper then PLU 999999 is set as the default PLU which will be printed utilising format 251 which is linked to Field definition list 2.

Field definition list 2

Number	Index	Description	Attribute	Format	Symbol
100	1	PLU text 1st line	a		0
100	10	PLU text 10th line	a		0
571	1	Date text 1st Line	a		0
571	2	Date life text 2nd line	a		0
30	0	System date	—		0
32	0	Time	—		0
33	0	Date 1	—		0
60	0	PLU number	—		0
61	0	Customer number	—		0
504	1	Fixed Text Line 1	—		0
504	2	Fixed Text Line 2	—		0
504	3	Fixed Text Line 3	—		0
504	4	Fixed Text Line 4	—		0
504	5	Fixed Text Line 5	—		0
504	6	Fixed Text Line 6	—		0
507	63	Registration endless paper	V	1.0	0

List 4 is as List 1 above but with the addition of the Weight Band selection

Field definition lists 4

Number	Index	Description	Attribute	Format	Symbol
401	0	Weight Table number	a		0
100	1	PLU text 1st line	a		0
100	to 10	PLU text 10th line	a		0
519	1	Ingredient text 1st line	a		0
519	to 6	Ingredient text 6th line	a		0
571	1	Date text 1st Line	a		0
571	2	Date life text 2nd line	a		0
504	1	Fixed text 1st line	—		0
504	to 3	Fixed text 3rd line	—		0
30	0	System date	—		0
32	0	Time	—		0
33	0	Date 1	a		0
34	0	Date 2	a		0
35	0	Date 3	a		0
12	0	Pagination number	—		0
8	0	Unit Price	—		0
24	0	Unit Price Symbol			0
11	0	Net Weight Kg/lb.			0
22	0	Weight Symbol			0
102	0	Weight Range Mode	v	1.0	0
99	0	Lower weight limit	v	6.3	0
99	1	Upper weight limit	v	6.3	0
99	2	Fixed Weight.....	v	6.3	0
21	0	Pack Price			0
23	0	Price Symbol			0
91	0	Country code	v	2.0	0
54	0	Labelling type	v	1.0	0
36	0	Barcode EAN 8	k		0
37	0	Barcode EAN 13	k		0
48	0	Barcode EAN 128	k		0
581	2	Article number	—		0
581	1	Flag number	—		0
522	1	Advertising text	k		0
522	to 3	Advertising text	k		0
95	0	Labelling Program number	v	3.0	0
9	1	PLU used to print total 1	v	6.0	0
9	2	PLU used to print total 2	v	6.0	0
9	3	PLU used to print total 3	v	6.0	0

Number	Index	Description	Attribute	Format	Symbol
9	5	PLU used to print total 5	v	6.0	0
150	0	Product group number	v	4.0	0
124	0	Label position (1–255)	v	3.0	0
122	0	Applicator force (1–255)	v	3.0	0
126	4	Conveyor Stop.(0–3)	v	1.0	0
123	3	Conveyor speed (0–2)	v	1.0	0
70	0	Print of packet * 1			0
71	0	Print weight of * 1kg/lb.			0
22	1	Total Weight Symbol. kg/lb.			0
72	0	Print Price *1			0
23	1	Total Price Symbol			0
73	0	Print of packet *2			0
74	0	Print Weight *2 kg/lb.			0
75	0	Print Price *2			0
76	0	Print of Packet *3			0
77	0	Print Weight *3 kg/lb.			0
78	0	Print Price *3			0
86	0	Print of packet *4			0
85	0	Print Price *4			0
84	0	Print weight *4			0
504	80	Fix text: NO	—		0
504	81	Fix text: *1*	—		0
504	82	Fix text: *2*	—		0
504	83	Fix text: *3*	—		0
504	84	Fix text: TOTAL	—		0
504	85	Fix text: *4*	—		0

Field definition list 3

Totals label format

Number	Index	Description	Attribute	Format	Symbol
100	10	PLU text 1st line	a		0
100	to 10	PLU text 10th line	a		0
571	1	Date text 1st Line	a		0
571	2	Date life text 2nd line	a		0
504	1	Fixed text 1st line	—		0
504	to 3	Fixed text 3rd line	—		0
30	0	System date	—		0
32	0	Time	—		0
33	0	Date 1	a		0
34	0	Date 2	a		0
35	0	Date 3	a		0
12	0	Pagination number	—		0
22	0	Weight Symbol			0
23	0	Price Symbol			0
91	0	Country code	v	2.0	0
36	0	Barcode EAN 8	k		0
37	0	Barcode EAN 13	k		0
48	0	Barcode EAN 128	k		0
522	1	Advertising text	k		0
522	to 3	Advertising text	k		0
95	0	Labelling Program number	v	3.0	0
150	0	Product group number	v	4.0	0
70	0	Print of packet * 1			0
71	0	Print weight of * 1kg/lb.			0
22	1	Total Weight Symbol. kg/lb.			0
72	0	Print Price *1			0
23	1	Total Price Symbol			0
73	0	Print of packet *2			0
74	0	Print Weight *2 kg/lb.			0
75	0	Print Price *2			0
76	0	Print of Packet *3			0
77	0	Print Weight *3 kg/lb.			0
78	0	Print Price *3			0
86	0	Print of packet *4			0
85	0	Print Price *4			0
84	0	Print weight *4			0
504	80	Fix text: NO	—		0
504	81	Fix text: *1*	—		0
504	82	Fix text: *2*	—		0
504	83	Fix text: *3*	—		0
504	84	Fix text: TOTAL	—		0
504	85	Fix text: *4*	—		0

Field definition list 102

Alternative field definition list for sub PLUs used for weight band operation

Number	Index	Description	Attribute	Format	Symbol
100	1	PLU text 1st line	V	S018	0
100	to 10	PLU text 10th line	V	S018	0
571	1	Date text 1st Line	V	S040	0
571	2	Date life text 2nd line	V	S040	0
33	0	Date 1	V	3.0	0
34	0	Date 2	V	3.0	0
35	0	Date 3	V	3.0	0
54	0	Labelling mode	V	1.0	0
36	0	Barcode EAN 8	V	S02	0
37	0	Barcode EAN 13	V	S02	0
48	0	Barcode EAN 128	V	S02	0
581	2	Article number	V	5.0	0
581	1	Flag number	V	8.0	0

7.2.8 Label formats

The default label format for a PLU label is:

Label format	Number 10
Index	Number 0
Label size	60.8 mm wide 80.5 mm long

Copy of label 254

Print Definition List 1

Label layout 4

Num	Index	Description	X	Y	Font	Num	Turn	Attribute	Centre
100	1	PLU text 1st line	1.6	0.8	4	20	0	1,2,3,4,5	1
100	2	PLU text 2nd line	1.6	7.0	3	30	0	1,2,3,4,5	1
100	3	PLU text 3rd line	1.6	14	3	30	0	1,2,3,4,5	1
519	1	Ingredient text 1st line	1.6	20	5	60	0	5	0
519	2	Ingredient text 2nd line	1.6	22.5	5	60	0	5	0
519	3	Ingredient text 3rd line	1.6	25	5	60	0	5	0
519	4	Ingredient text 4th line	1.6	27.5	5	60	0	1,2,4,5	0
571	1	Date text 1st line	1.6	30.5	2	14	0	5	0
571	2	Date life text 2nd line	34	30.5	2	15	0	5	0
507	1	Fixed text line 1	1.6	21	5	60	0	–	5
30	0	System date	36	34	2	9	0	3,4	0
33	0	Date 1	16	34.5	2	9	0	5	0
34	0	Date 2	34	34.5	2	9	0	5	2
8	0	Unit Price	6.5	45	3	6	0	5	2
24	0	Unit Price Symbol	11.5	40	98	1	0	5	0
11	0	Net Weight Kg/lb.	26	45	3	6	0	5	2
22	0	Weight Symbol	30	40	98	1	0	5	0
21	0	Pack Price	46	50	4	6	0	5	2
23	0	Price Symbol	51	44	99	1	0	4	0
37	0	Barcode EAN 13	37	60	1	180	0	1,2,3,4,5	0
522	1	Advertising text 1st line	1.6	56	2	14	0	–	0
522	2	Advertising text 2nd line	1.6	61	1	28	0	–	0
522	3	Advertising text 3rd line	1.6	64.5	1	28	0	–	0
70	0	Print of packet * 1	1.6	17	2	5	0	1	0
71	0	Print weight of * 1kg/lb.	8	35	3	8	0	1	0
22	1	Total Weight Symbol kg/lb.	15	30	98	1	0	1,2,3,4	0
72	0	Print Price *1	36	50	4	9	0	1	0
23	1	Total Price Symbol	51	44	99	1	0	1,2,3,4	0
73	0	Print Of packet *2	1.6	46	2	5	0	2	0
74	0	Print Weight *2 kg/lb.	1.6	65	3	8	0	2	0
75	0	Print Price *2	36	35.5	4	8	0	2	0
76	0	Print Of Packet *3	1.6	17	2	5	0	3	0
77	0	Print Weight *3 kg/lb.	8	35.5	3	8	0	3	0
78	0	Print Price *3	36	50	4	8	0	3	0
504	80	Fix text: NO	1.6	23.5	2	14	0	1,2,3,4	0
504	81	Fix text: *1*	1.6	12	2	15	0	1,2,3,4	0
504	82	Fix text: *2*	1.6	41	2	15	0	2	0
504	83	Fix text: *3*	35	39	2	14	0	1,2,3,4	1
504	84	Fix text: TOTAL	35	14	4	9	0	3	0
84	0	Print weight *4	1.6	35.5	4	9	0	4	2
85	0	Print Price for *4	36	50	4	9	0	4	2
86	0	Print of packs *4	3.6	50	2	5	0	4	0
504	85	Fixed text *4*	38	140	4	8	0	4	0

7.2.9 Default PLU

The default PLU will be number 50

The Data in the PLU will be as listed below.

Label Format 10
Index 0

401	0	Weightable	—
100	1	PLU text line 1	Cumberland
100	2	PLU text line 2	Sausage
100	3	PLU text line 3	Farm produced
519	1	Ingredient text line 1	Pork: Bread Crumbs; Onions; Seasoning
571	1	Date 1 Text	Best Before
571	2	Date 2 Text	Eat by
33	0	Date 1	2
34	0	Date 2	4
61	0	Customer	0
102	0	Weight Range	–
99	0	Lower limit	–
99	1	Upper limit	–
99	2	Fixed Weight	–
91	0	Country Code	6
54	0	Labelling Mode	0
2	0	Tare	0.010 kg
8	0	Unit price	2.50 £/kg
37	0	Barcode EAN 13	#1
581	2	Article number	4444
581	1	Flag number	02
522	1	Advertising text line 1	Adams Butchers
522	2	Advertising text line 2	Millington Road
522	3	Advertising text line 3	Glasgow
95	0	Labelling Program	1
124	0	Labelling position	47
122	0	Applicator force	75
123	3	Conveyor speed	3
126	4	Conveyor stop	2

7.2.10 Total 1,2,3,4 and 5

PLU numbers used for total 4

For printing on continuous thermal paper PLU 999999 linked to Label format 251 index 0

For printing on individual labels use PLU 888888 linked to Label format 252

Label formats for totals

For totals 1, 2, 3 and total 5 use the default label format 10

For totals 4 use label format 251 index 0 for continuous paper and label format 252 index 0 for single label format

7.2.11 Weight bands

The default weight band table is 1

The default Weight band Main PLU is 400 with Subordinate PLUs being 401, 402, 403 and 404,

The Weigh Band table is as follows:

Weight bands

Table 1

MIN–WEIGHT	MAX.–WEIGHT	PLU NUMBER
100	250	401
251	350	402
351	450	403
451	550	404

The main PLU 400 will be linked to label format 10 and field Definition List 4

Subordinate PLU Numbers 401, 402, 403, and 404 will be linked to label format 199 and Field Definition List 102.

7.2.12 Default operator passwords

The following passwords will be programmed to insure that the System and data files will not be accidentally erased by the operator.

Password entry

Menu	Number	Name of menu option	Password
5	2	Erase Data Files	A–B
5	3	Erase System Files	A–B

7.3 Default settings for MX400 interface to B806

7.3.1 Implementing

The product structure needs to be obtained from the B806.

1 Using the dongle, select the option

8 Service Data Management
3 Save System

2 Insert DOS format floppy and backup the system information onto floppy.

3 After the backup is complete, check that the file ‘system.lfl’ is on the diskette.

4 On the PC where the MX400/MX100 is installed you need to determine the installation directory. It depends on what directory was chosen at installation time.

For MX100 it should be \MX100
For MX400 it should be \MX400
For MX410 it should be \MX410

5 Change to the appropriate installation directory.

6 The system.lfl file needs to be copied onto the PC and renamed at the same time. Type

Copy a:system.lfl b806.lfl

This will copy the file into B806.lfl. The MX100 will use this to build up the internal definition of the current product structure.

7 Perform a network test using MX400/MX100 and check that it works.

7.3.2 Online settings on the B806

From the main menu select

4 System Data
6 online Configuration

Below are the settings for MX400/MX100 communications

Configuration Number:	1	Standard-Com-Port
Group Number:	0	Interface
BAUDRATE		9600
PARITY		NONE
DATABITS		8
STOPBITS		1

Configuration Number:	1	Standard-Com-Port
Group Number:	1	Character codes
ACK		06
NAK		15
STX		02
ETX		03
Configuration Number:	1	Standard-Com-Port
Group Number:	2	Timeouts
MESSAGE		5000
CONFIRMATION		5000
SUBMESSAGE		5000
Configuration Number:	1	Standard-Com-Port
Group Number:	3	Protocol
HANDSHAKE		NONE
CHECKSUM		1BYTE
DC1		11
DC3		13
Configuration Number:	1	Standard-Com-Port
Group Number:	4	Message
MAX.LENGTH		256
DELIMINATOR NO/DATA		;
REPEATS		2
Configuration Number:	1	Standard-Com-Port
Group Number:	5	Function Mode
APPLICATION		MESSAGE
I/O PROTOCOL		NO PROTOCOL
PORT		RS232
ONLINE		SWITCH ON
ERROR TEXTS		NO
ENQUIRE MODE		OFF

7.3.3 Initial configuration to allow MX400/MX100 to send data

In order to allow MX400/MX100 to send PLU data, several items need to be set-up on the B806:

1 What ever label format is to be used, copy it to label 1 index 0, label 2 index 0, label 3 index 0, label 4 index 0, label 5 index 0. This is needed because the label format must exist before the PLU can be created. Until further notice MX400/MX100 can only use label format number 1 – 5.

2 For MX400 create an EAN13 barcode format as follows:

1	581,2
2	581,2
3	581,2
4	581,2
5	581,2
6	581,2
7	556,6
8	18,0
9	18,0
10	18,0
11	18,0
12	18,0
13	556,1

Whatever barcode format is chosen then this must be set-up in the link list of the MX400. Check with the Customer first to decide what format is needed.

7.4 Transmission of PLU number and weight

7.4.1 Hardware requirements

The B806 has an RS232 interface for host communication.
Transmission rates 2400, 4800, 19200 and 38.400 baud.

The corresponding COM interface of the PC must be configured as follows.

PARAMETER	BASIC CONFIGURATION	ALTERNATIVE	REMARK
Code	ASCII		
Length of word	8 bits	7 bits	For 8 bits data format, 8th bit (MSB) set either on 0 or 1
Paritybit	NO	EVEN, ODD	
Number of stopbits	1	2	
Baudrate	9600	2400;4800; 19200;38400	

The connection cable must be terminated as follows:

```
2 -- RX ------------------------------- TX --- 2
3 -- TX ------------------------------- RX-- 3
5 -- GND ------------------------------ GND - 7
7 -- RTS ------------------------------ CTS -- 5 --- ) connected
                                          6 --- ) together
8 -- CTS ------------------------------ RTS -- 4
9 PIN Sub D (male)                    25 PIN SUB D (female)
```

Maximum cable length 15m

7.4.2 Telegram format

Sx n n ; Para. [Index] VALUE \ Para. [Index] VALUE \ .. .. \ Ex Cs

Legend:

Character	Name	Code	Meaning
Sx	STX = Start of Text	02H	Start of telegram
nn	Telegram number	–	n–digit
;	Semicolon	3BH	End: telegram number.
[	Square	5BH	End: Parameter
]	Bracket	5DH	End: Index
\	Backslash	5CH	End: VALUE
Ex	ETX = End of Text	03H	
Cs	Checksum		End of telegram

7.4.3 Delimiter

The delimiter or separator ‘;’ between the telegram number and data may be configured at discretion.

7.4.4 Backslash

Each information unit is closed by a backslash ‘\’ a so–called value delimiter, hence it is recommended not to use ‘\’–character within the text (value). Where this cannot be avoided, you should enter ‘\\’ to avoid errors.

7.4.5 Checksum

Example for a checksum :

ASCII:	**STX**	**0**	**;**	**8**	**2**	**5**	**[**	**0**	**]**	****	**8**
HEX:	**02**	**30**	**56**	**38**	**32**	**35**	**5B**	**30**	**5D**	**5C**	**38**

3	**1**	**[**	**0**	**]**	**8**	**2**	****	**8**	**3**	**1**	**[**
33	**31**	**5B**	**30**	**5D**	**38**	**32**	**5C**	**38**	**33**	**31**	**5B**

1	**]**	**0**	****	**ETX**	**Checksum**
31	**5D**	**30**	**5C**	**03**	**52 Hex**

7.4.6 Standard setting:

The checksum is calculated by the addition of all telegram data including STX and ETX in HEX: The checksum of the telegram showing above therefore is 6AE.

Since we use 1 byte presentation the 6 is left out, therefore the result is AE. We then form a so–called dual complement by subtracting the sum from 100 HEX

100 Hex –AE Hex = 52 Hex

7.4.7 Telegram header

The first parameter–unit (parameter number, index, value) is called telegram header:

- the instruction and the feedback have a specific header, e.g. 823[0]0 = O
- the order reports and the replies to request have no headers:

Normally no values except feedback are transferred in the telegram header.

7.4.8 Summary of technical specifications

Parameter	Basic setting	Possible	Remark
Separation character number/ data	‘;’	‘:’ or ‘/’ or ‘,’	between telegram and data
Checksum	1 byte	2 Bytes LRC CRC 16	2 bytes for XON/XOFF not available not available
Telegram length	256 bytes	128 – 1024 Bytes	

7.4.9 Summary of setup menu

Parameter	Basic setting	Possible	Remark
Interface	RS 232		
Hardware Handshake	NONE	XON/ XOFF	RTS/CTS is recommended for download. XON/XOFF
Software Handshake	ACK/ NAK	other control characters	ACK = 06H; NAK = 15H refers only to the verification of the checksum
Time–out for ETX	300 ms	XXX ms	Uncompleted telegram
Time–out for ACK/NAK	300 ms	XXX ms	No confirmation
Time–out for follow–up telegram	300 ms	XXX ms	The number of the last received telegram is >0
Number of repeats	2	X	For NAK or no reply –> time–out is reached
Baudrate	9600	2400; 4800; 19200; 38400	Within possible limits for RS 232
Parity	None	Even	
Databits	8	7	
Time–out ‘Feedback’	5 s		Feedback only after receipt of telegram #0

7.4.10 Initialization

When the B806 is first powered on it will send out its configuration telegram every 12 seconds until the host responds (The configuration telegram consists of the version number of the software and current free memory). It is essential that the host sends the initialisation telegram in order to to stop the B806 sending its configuration telegram. Until this is done, no futher communications can take place. When initialisition is complete the B806 indicator will show ‘ONLINE’ on the top of the display.

The host must send an initialisation telegram, in order to establish a dialogue with the B806.

For example:

Initialisation telegram sent by host
STX 0;820[0]0\ ETX<82>

Par	Ind	Name	Value	Remark
820	0	INIT	0 = Download	

If the B806 is already switched ON when the host sends the initialisation telegram then it responds with an ACK and then the configuration telegram.

Response from B806 after host sends initialisation telegram
STX 0:823[0]0\820[0]]\ETX<A1>

The parameters in the configuration telegram have the following meaning:

Par	Ind	Name	Value	Remark
823	0	Acknowledge		
820	0	INIT	0 = Download	

7.4.11 PLU and weight transmission

When a stable weight is achieved and a label is issued the PLU number and the weight are transmitted as follows:

STX 0;899[4]\60[0]20\11[0]376\ ETX <4C>

Par	Ind	Name	Value	Remark
899	4	Send to host	4= PLU number and weight	
60	0	PLU number	PLU number	
20		Actual PLU 20		
11	0	Weight		
376		Actual weight of 376 g		1.5 kg will be transmitted as 1500

Typical example

Host	B806
STX 0;820[0]0\ ETX<82>	
	ACK
	STX 0:823[0]0\820[0]]\ETX<A1>
ACK	
	STX 0;899[4]\60[0]20\11[0]376\ ETX <4C>
ACK	

7.5 Setting up the B806 to transmit the weight and PLU number to the Q4 application after every weighing/labelling operation

7.5.1 Setting the online configuration

Set the online configuration as per the instructions defined in the document : B806 Interface documentation

7.5.2 Transmission of PLU number and weight

Creating new parameter

Add the following parameter and description to the selection section of the Parameter List:

499	14	60.0,11.0;

7.5.3 Additions function required for inclusion in the labelling program

Modify the Standard Labelling program 50 to include the additional functions defined in line 2 and 41.

Standard labelling program 50

Labelling Program 50					
Line	**Code**	**Sub Code**	**Description**	**Attribute**	**Value**
1	3	1	Special Mode 1		0
2	90	7	Branch if weight to		41
3	90	3	Branch if numeric to		19
4	90	6	Branch if Key x to	F1	21
5	90	6	Branch if Key x to	F2	23
6	90	6	Branch if Key x to	F3	25
7	90	6	Branch if Key x to	#	17
8	90	5	Branch if Key F to	F	20
9	90	6	Branch if Key x to	F4	27
10	90	6	Branch if Key x to	F5	29
11	90	6	Branch if Key x to	F6	31
12	90	6	Branch if Key x to	→	33
13	90	6	Branch if Key x to	←	35
14	90	6	Branch if Key x to	↑	37
15	90	6	Branch if Key x to	↓	39
16	90	0	Branch always to		1
17	96	104	Minus		0
18	90	0	Branch always to		1
19	3	2	Repeat last key		0
20	3	3	Return to start		0
21	96	105	Fast data input		0
22	3	3	Return to start		0
23	96	108	Pusher (machine)	#	0
24	90	0	Branch always to		1
25	96	109	Pusher article	#	0
26	90	0	Branch always to		1
27	151	0	Automatic		0
28	90	0	Branch always to		1
29	151	1	Manual		0
30	90	0	Branch always to		1
31	151	2	Transport		0
32	90	0	Branch always to		1
33	124	3	Label– Position (+)		1
34	90	0	Branch always to		1

Labelling Program 50					
Line	**Code**	**Sub Code**	**Description**	**Attribute**	**Value**
35	124	4	Label Position (–)		1
36	90	0	Branch always to		1
37	122	5	Applicator force +		1
38	90	0	Branch always to		1
39	122	6	Applicator force –		1
40	90	0	Branch always to		1
41	58	0	Transmit to host		899.14
42	90	0	Branch always to		1

Section PL

Parts List

Introduction

The recommended spare parts list defines the spares that the engineer should carry as car stock and the stock that the OPCO or Territory Main Stores should hold to support the engineer.

During the initial stages of the distribution of the B806 it will probably not be necessary to create a central stock holding and engineer's stock of the same part.

As the installed base increases, and the number of engineers involved in the support of the product increases, then the two separate stocks can be maintained.

During the life of this product there will be a number of enhancements and if necessary revision of the Parts manual will be issued as supplements to the original manual.

Recommended spare parts list

Part number	Description	Engineer's car stock	OP CO's dept. stock	Total Cost
213716	Floppy drive		1	
221306	Rectifier		1	
224407	LCD Display		1	
231108	Capacitor		1	
255504	Main Switch		1	
284120	Mains suppression filter		1	
E–344–150	Keyboard interface board		1	
E–344–181	Conveyor control CPU		1	
E–344–210	Hall sensor PCB		1	
E–344–242	Photo cell board		1	
E–344–275	Main Power Supply Board			
E–344–282	Main distribution board	1		
E–344–403	Indicator CPU board	1	1	
344510	PCB Conveyor control		1	
E–344–580	Printer applicator power board	1	1	
E–344–590	PCB for CPU		1	
E–478–066	Felt	1		
488320	O Ring	2	4	
E–488–399	Applicator foot		1	
510288	Base work		1	
520568	Drive roller		1	
520599	Roller complete	1	2	
E–520–785	Piston rod complete			
E–520–787	Cylinder pipe complete			
E–522–645	Thermal print head with felt	1	2	
E–522–652	Camshaft		1	
550183	Stepper motor complete		1	
E–550–481	Drive roller		1	
551033	Compressed Air filter		1	
E–551–042	Value block			
E–560–108	Reflective photo cell		2	
560116	PCB scale complete		1	
560156	Adapter cable for LCD		1	
70345	Tooth belt		2	
E–710–912	Rewind drive belt	1	1	
711431	Gravity outfeed roller		4	

Part number	Description	Engineer's car stock	OP CO's dept. stock	Total Cost
730213	Damper Air pot	2	6	
731012	Hinge foot		4	
731711	O ring for adjustable damper	1	1	
731732	O Ring for damper	1	1	
771306	Knurled screw for axle	1	2	
775534	Axle for roller	1	2	
780914	Vacuum Filter		1	
780916	Filter cartridge	4	10	
780917	Filter bowl	1	1	
780919	Filter Cartridge	1	2	
781709	3/2 magnetic value	1	2	
E–782–407	Silencer for damper	1	1	
782703	Vane for Vacuum pump (Becker)	5	5	
782710	Vacuum Pump			
782711	Vane for Vacuum Pump (Busch)	1 set	1 set	
817007	Scale			
344332M3	Floppy drive controller board		1	
344365M3P	Printer CPU board	1	1	
371655	Cable extension for Motor		2	
E–142–106	Transformer		1	
E–344–690	Applicator CPU board	1	1	
E–435–280	Keypad	1	1	
E–449–162	Belt cover		1	
E–523–401	Locking lever complete		1	
E–550–189	Motor complete		1	
E–550–480	Idler Roller		1	
E–602–733	Piston complete		1	
E–710–346	Tooth belt	2	4	
E–711–078	Transport belt			
E–731–735	Rotary seal for roller		4	

The address of your Avery Berkel centre is ...

FM 01255

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