31-12-90 FG

CANCELLED 0/3

# NATIONAL STANDARDS COMMISSION

WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS - REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S118

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

Proeda Fuel Usage Recorder Model R41

submitted by Proeda Australasia Pty Ltd,
11 Whiting Street,
Artarmon, New South Wales, 2064,

are suitable for use for trade when attached to a Veeder-Root Model 101 or Model VR2002AE driveway flowmeter indicator.

The approval of the pattern and variants is subject to review on or after 1/12/86.

All driveway flowmeters modified by the fitting of a fuel usage recorder purporting to comply with this approval shall be marked NSC No S118 in addition to the approval number of the unmodified pattern.

Relevant drawings and specifications are lodged with the Commission.

Conditions of Approval

1. (a) The pattern may only be attached to a Veeder-Root Model 101 driveway flowmeter price-computing indicator in any of the Commission-approved driveway flowmeters listed in Table 1 of the Technical Schedule when they are installed as stand-alone units.

(b) Variant 1 may only be attached to a Veeder-Root Model VR2002AE price-computing indicator as described in Technical Schedule No S118, Variation No 1, dated 5/6/81.

Signed

Executive Director

Descriptive Advice

Pattern: approved 25/1/82

. Proeda fuel usage recorder model R41 driven from a VR101 price-computing indicator.

Technical Schedule No S118 dated 25/3/81 describes the pattern.

Variant: approved 12/5/81

1. Driven from a model VR2002AE price-computing indicator.

Technical Schedule No S118, Variation No 1 dated 5/6/81 describes variant 1.

19/2/82 ...../2

## Filing Advice

Certificate of Approval No PS118 dated 5/6/81 is superseded by this Certificate and may be destroyed.

Technical Schedule No PS118 dated 25/3/81, including Table 1 and Figures 1 to 11, Technical Schedule No PS118 Variation No 1 dated 5/6/81, and Test Procedure No PS118 dated 25/3/81, are all renumbered S118.

The documentation for this approval now comprises:

Certificate of Approval No S118 dated 19/2/82
Technical Schedule No S118 dated 25/3/81
Technical Schedule No S118 Variation No 1 dated 5/6/81
Test Procedure No S118 dated 25/3/81.

# NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No PS118

Pattern: Proeda Fuel Usage Recorder Model R41

Submittor: Proeda Australasia Pty Ltd,
11 Whiting Street,
Artarmon, New South Wales, 2064.

## 1 Description of Pattern

### 1.1

The pattern is a fuel usage recorder, and driveway flowmeter controller designed to be attached and driven from the litre shaft of a Veeder-Root Model VR101 price-computing indicator in any Commission-approved driveway flowmeter listed in Table 1 and installed as a stand-alone unit. The instrument may be attached to a maximum of four driveway flowmeters and is 'customer-operated' using a credit card. The system can have a maximum of 10 000 credit card users.

The system comprises:

(a) Up to four (4) driveway flowmeters.

(b) An impulse transmitter model 0081.0001/100/2 attached to the litre shaft of the VR101 indicator in each driveway flowmeter (Figure 1).

(c) Fuel usage recorder control unit incorporating both customer and vendor controls and indications (Figures 2 and 3).

(d) A metallised paper tally roll which forms the prime source of data for invoicing.

(e) A floppy-disc recorder with vendor-only controls for recording customer transactions for invoicing purposes (Figure 9) (not subject to pattern approval). A customer invoice is produced by a computer-based account system which analyses the transaction data from the floppy-disc (Figure 10).

### 1.2 Customer controls and indications on the Control Unit

1.2.1 Credit card reader: A coded credit card is inserted in the Control Unit via the slot marked "A". Each of the maximum of 10 000 credit card holders has a 4-digit account number and a 4-digit secret code number corresponding to his card (Figures 2 and 8).

1.2.2 Keyboard: The keyboard consists of ten buttons and is used to enter into the machine the code corresponding to a particular credit card. The keyboard is above the letter "B" marked on the front panel of the control unit (Figure 2).

1.2.3 Authorisation buttons: The four white buttons above the letter "C" numbered 1, 2, 3 and 4 activate a driveway flowmeter after the code has been keyed into the keyboard (Figure 2).

1.2.4 Credit card return button: At the end of a delivery of fuel, the (yellow) button is pressed to return the credit card to the customer.

If this button is pressed during a delivery the transaction is terminated and the credit card returned. This button is adjacent to the letter "E" on the front panel of the control unit. If a customer neglects to press the return button, an alarm signal sounds after approximately 20 seconds. If then the return button is pressed the customer can recover his credit card. If the customer does not respond to the signal the credit card will be pulled into the machine after an adjustable period of approximately 40 seconds and retained in a locked area within the Control Unit (Figure 2).

1.2.5 Printer: On pressing the yellow credit card return button the transaction in progress or just completed is finalised by the printer recording the details of the transaction on a metallised paper roll. The information recorded left to right is the customer 4-digit account number, the number of whole litres delivered, the number of hundredths of litres delivered, the driveway flowmeter number (1, 2, 3 or 4) and the day of the year (Figures 6 and 7).

The maximum delivery that an individual customer may obtain at any one time can be internally set between 90 litres and 800 litres. The printer or customer's indicator is located adjacent to the number "5" on the front panel of the control unit (Figure 2).

In the event of a floppy-disc failure the floppy-disc selector can be switched to the "off" position and the individual transactions recorded on the tape are manually totalled as the record of transactions on the metallised paper roll remains the the primary record for all accounting purposes. The invoice totals obtained from analysis of the floppy-disc record should be checked against the primary record on the roll.

## 1.3 Vendor controls and indications on the Control Unit

Access is gained to various vendor functions by unlocking and opening the front panel of the Control Unit (Figure 3).

1.3.1 Timer clock and date buttons: The timer clock and the three date push-buttons are used to set the day of year according to Figures 6 and 7. From left to right the "date" buttons set the hundreds of days, tens of days and single unit days. During an interruption of power, the date does not continue and must be reset (Figure 3).

1.3.2 Control Unit totalising functions: Using this function the vendor can perform totalising functions for the first seven account numbers and the four driveway flowmeters. These totalising functions are not the primary recordings used for customer accounting. The information recorded on the floppy-disc is used to prepare customer accounts as described in 1.3.3 below.

(a) Pressing and then releasing the (green) button marked "total" will cause the printer to print out on a single line the totals (whole litres only) for each of the four driveway flowmeters. This information is printed in the form, left to right: a cipher identifying driveway flowmeter totals "9999", then the totals (whole litres only) for driveway flowmeters one to four, then a number identifying the station.

Only whole litres are printed; however the hundredths of litres are stored and accumulated.

These quantities are progressively totalled and cannot be zeroed.

(b) Pressing and holding the (green) button marked "total" will cause the printer to operate as in (a), and then to print the totals (whole litres only) for each of the first seven account numbers on each of the four driveway flowmeters.

This information is printed in the form, left to right: account number, totals (whole litres only) for driveway flowmeters one to four, then a number identifying the station.

As for (a), only the whole litres are printed; however the hundredths of litres are stored and accumulated. The driveway flowmeter totals for each of the first seven account numbers are progressively totalled and cannot be zeroed.

1.3.3 System Accounting: All transactions are recorded on the floppy-disc recorder connected to the control unit and also on the paper roll. From this information customer invoices in the form shown in figure 10 are produced from a computer-based accounting system monitored either by Proeda Australasia Pty Ltd or the purchaser of the R41 Fuel Usage recorder. The information recorded on the floppy-disc is the data used in customer accounting; the invoice must contain the minimum of information as shown in Figure 10.

1.3.4 Carriage button: Pressing the yellow button marked "PAPER" allows the slack in the paper roll to be taken up (Figure 3).

1.3.5 Customer barring facility: Allows a vendor to bar a customer from obtaining fuel through use of the fuel usage recorder. The credit card can be taken in by the control unit and deposited in the card magazine drawer on the lower left hand corner of the instrument. If on three consecutive attempts an incorrect code is entered via the keyboard the credit card will be taken in by the control unit and deposited in the card magazine drawer (Figure 3).

1.3.6 (Red) release button: If a credit card is blocked in the card reader, this button may be pressed and the card released (Figure 3).

1.3.7 Battery test button: The white battery test button checks the condition of the batteries which are used to operate the printer in the event of a mains voltage power failure. With a credit card inserted and accepted, pressing and holding this button for 10 seconds should disconnect the 240V mains supply and cause the printer to print the account number of the card inserted, the driveway flowmeter number and day of year, and indicate zero litres delivered if delivery has not commenced. If the printer does not operate, the batteries need immediate replacement (Figure 3).

1.3.8 Floppy-disc selector: Will normally be in the "on" position as shown in figure 3. The system will not be in use under normal conditions without the floppy-disc recorder. However the paper roll record is the primary record for accounting purposes whether the floppy-disc is connected or not.

## 1.4 Vendor Indications and Controls on Floppy-disc recorder

1.4.1 A push-button key operates the drive-door and ejects the floppy-disc. When power is connected to the unit and the light on the door is on, the door is electrically locked and cannot be opened (Figure 9). A key-operated switch enables the drive-door to be opened.

1.4.2 Four indication lights (Figure 9) show:

(1) if the equipment is not ready,

(2) if there is an error,

(3) if the floppy-disc is full, and

(4) if a test routine is in progress.

## 1.5 Sealing

The control unit is sealed as shown in Figure 4. The verification stamping plug and nameplate are as shown in Figure 5. The cables on the floppy-disc recorder are sealed as shown in Figure 11.

# TEST PROCEDURE No PS118

The following Test Procedure will ensure that the Fuel Usage Recorder is operating in accordance with the approved design:

1. Obtain from the station operator a credit card for use with the four driveway flowmeters connected to the Fuel Usage Recorder and note the account number and secret code corresponding to the card. Also obtain the key to the hinged front panel of the control unit.

2. Insert the card, metal face up, into the card slot with the arrow pointing towards the instrument.

   2.1 Enter the 4-digit code for that card into the instrument via the keyboard and press the "authorise" button corresponding to driveway flowmeter number 1. Driveway flowmeter number 1 will now be authorised and a delivery can commence.

   2.2 Lift the nozzle of driveway flowmeter number 1 and deliver approximately 15 litres of fuel. Record the quantity delivered to the nearest 0.1 litre as indicated on the driveway flowmeter indicator. Hang-up the nozzle.

   2.3 At the control unit press the yellow "return" button. The credit card will be returned and a record of the transaction printed. This quantity should agree with that indicated on the driveway flowmeter and recorded in 2.2 to within 0.1 litre.

   2.4 In addition check that the account number printed corresponds to that for the card used and that the driveway flowmeter number printed corresponds to the driveway flowmeter from which fuel was just dispensed. Also check that the day of the year recorded is correct.

   2.5 Repeat 2 to 2.4 inclusive, this time for a delivery of say, approximately 30 litres.

3. Repeat 2 to 2.5 using driveway flowmeter numbers 2, 3 and 4.

4. Open the front panel of the control unit and insert the credit card and press in the code. Press the white 'authorisation' button for any driveway flowmter.

   4.1 Press and hold the white BATTERY TEST button. The printer should after a period of 5-10 seconds respond and print the account number for the credit card used, zero for the quantity delivered, the number of the driveway flowmeter authorised and the day of the year. If the printer does not respond the batteries in the system need to be immediately replaced. Close the front panel and lock.

5. Accuracy tests should be conducted on the driveway flowmeters connected to this pattern, in accordance with the relevant tests of the certificate issued for the respective driveway flowmeters.

6. Return the credit card and the key of the front panel to the station operator.

7. At the end of the accounting periods in which tests were conducted, an invoice produced by the accounting system will be forwarded to the Weights and Measures office detailing the transactions made by the inspector during tests. This should be verified against your test records on receipt.

25/3/81

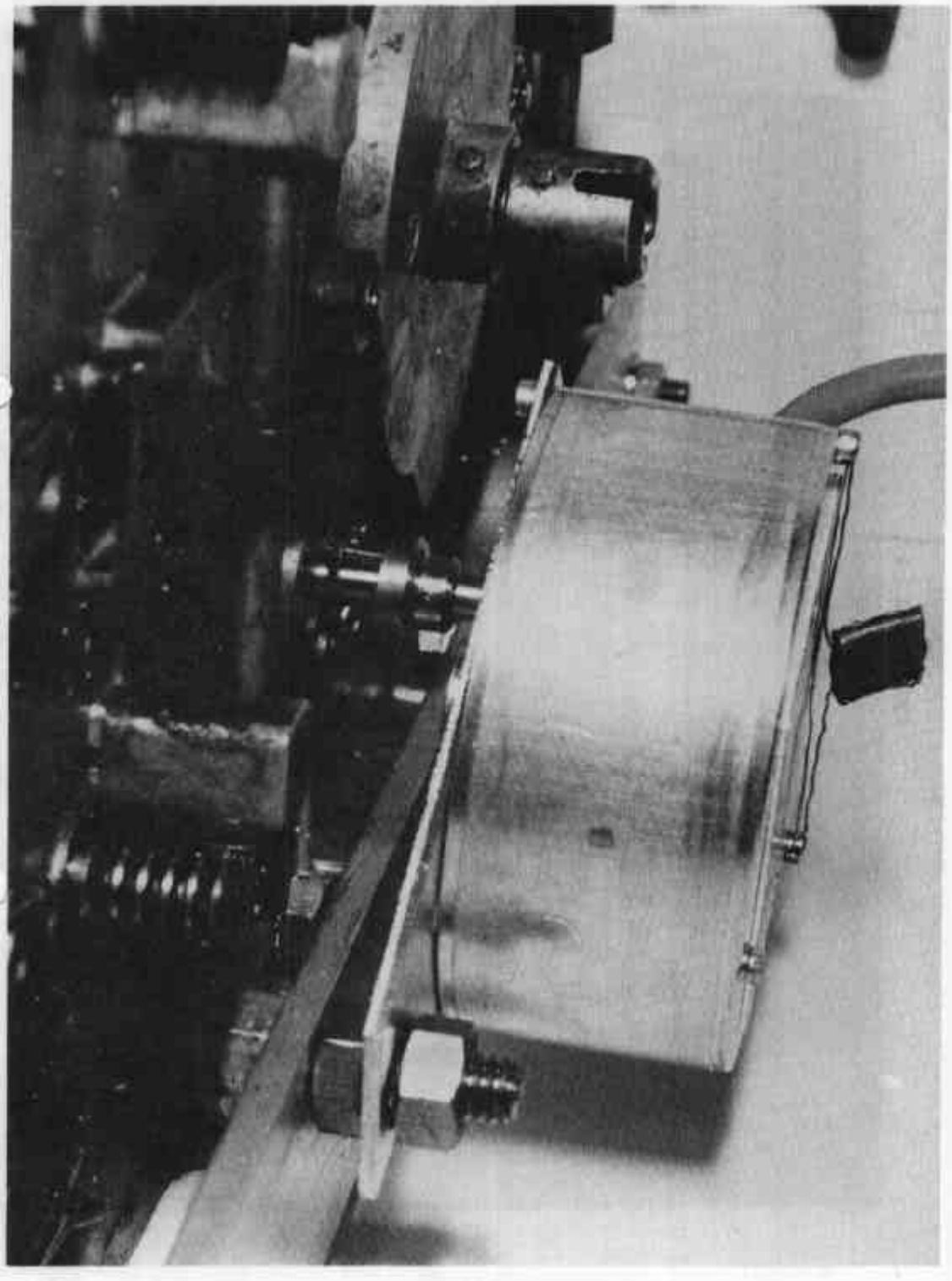
## TABLE 1

### CERTIFICATE OF APPROVAL No

5/6A/47
5/6A/61
5/6A/62
5/6A/63
5/6A/66

The Proeda Fuel Usage Recorder may only be attached to instruments which conform to the above patterns, which are fitted with VR101 price computing indicators, and which are installed as stand-alone units.

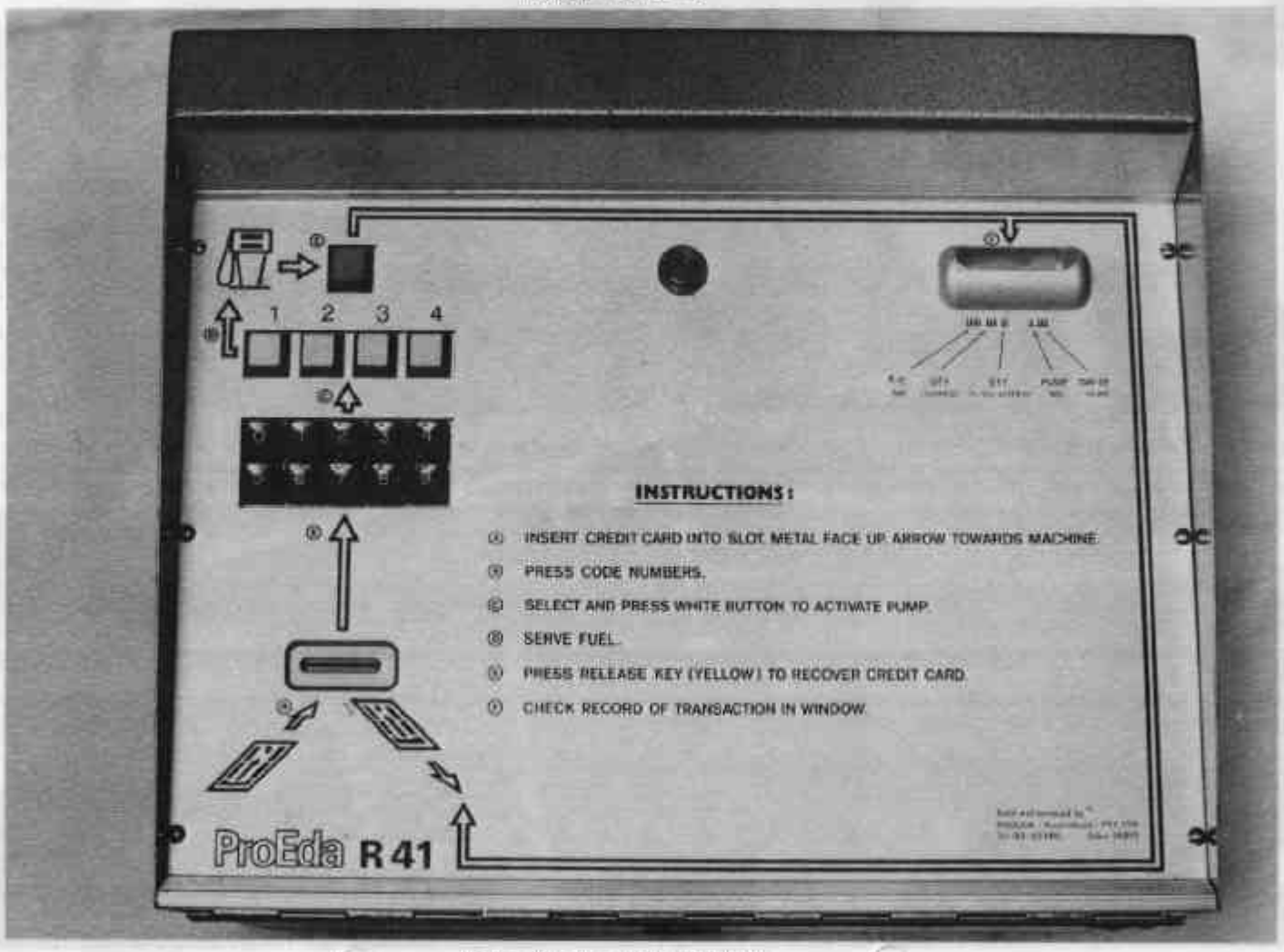
FIGURE PS118 - 1



Pulse Transmitter Model 0081.0001/100/2

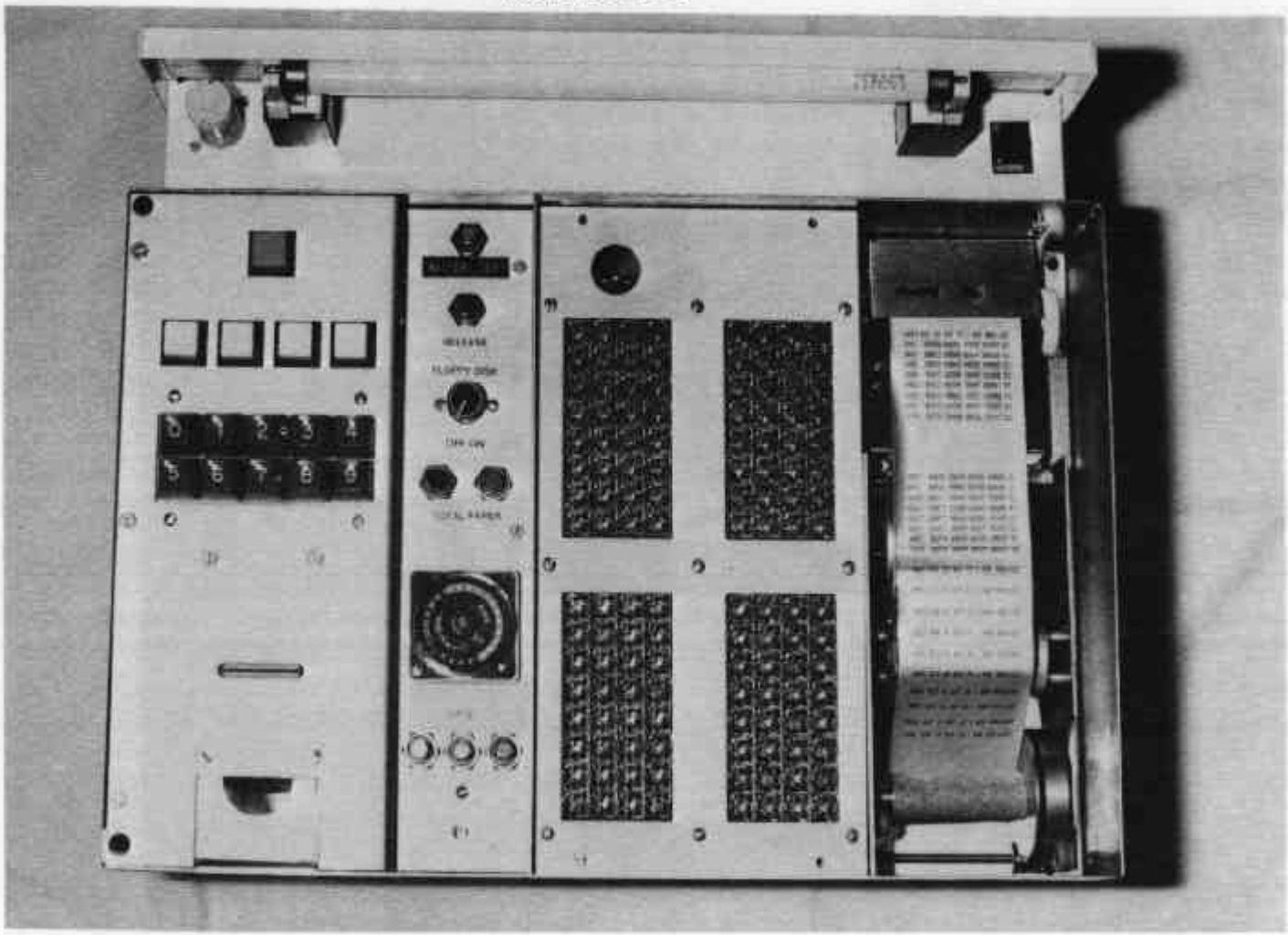
25/3/81

FIGURE PS118 - 2



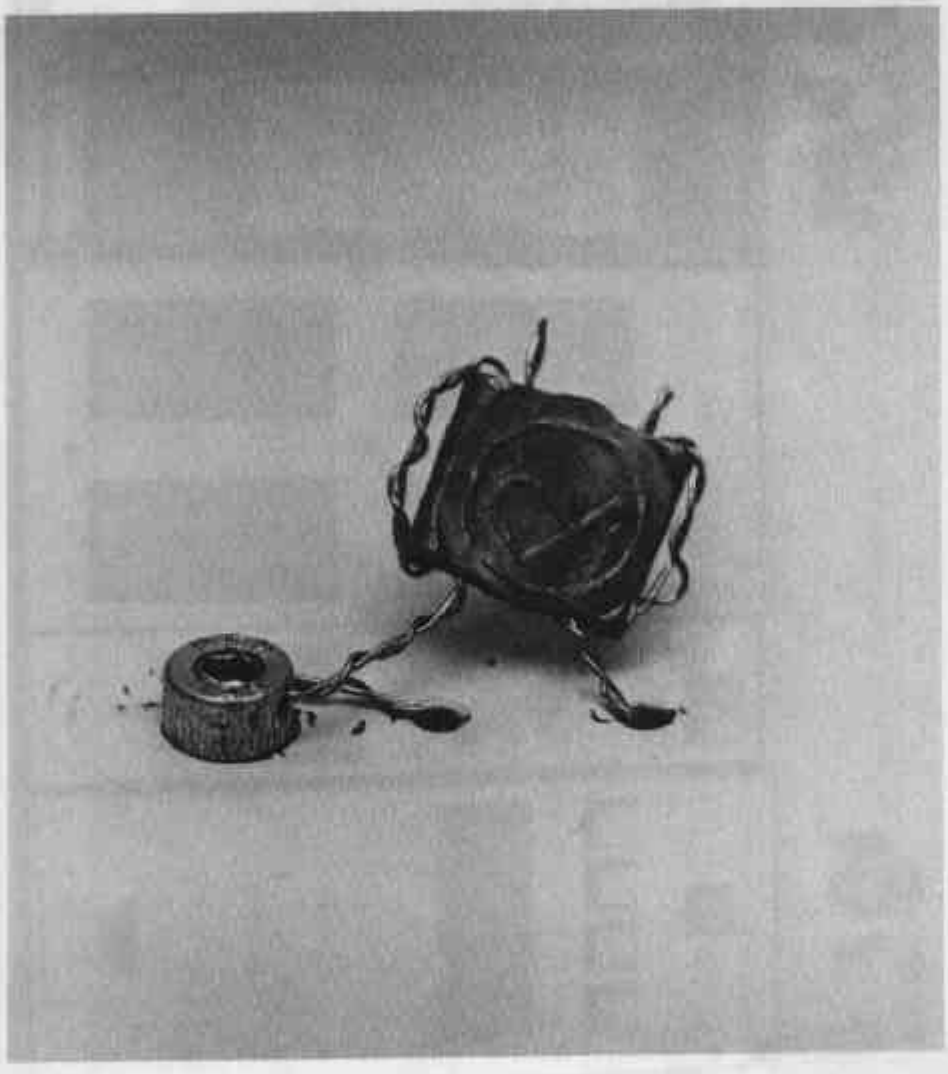

Front Panel of Control Unit

FIGURE PS118 - 3



Vendor Controls inside Front Panel of Control Unit

FIGURE PS118 - 4



Control Unit Sealing
(inside hinged door cover)

25/3/81


Data Plate and Stamping Plug

FIGURE PS118 - 6

Date-table

| Date | January | February | March | April | May | June | July | August | September | October | November | December |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1 | 32 | 60 | 91 | 121 | 152 | 182 | 213 | 244 | 274 | 305 | 335 |
| 2. | 2 | 33 | 61 | 92 | 122 | 153 | 183 | 214 | 245 | 275 | 306 | 336 |
| 3. | 3 | 34 | 62 | 93 | 123 | 154 | 184 | 215 | 246 | 276 | 307 | 337 |
| 4. | 4 | 35 | 63 | 94 | 124 | 155 | 185 | 216 | 247 | 277 | 308 | 338 |
| 5. | 5 | 36 | 64 | 95 | 125 | 156 | 186 | 217 | 248 | 278 | 309 | 339 |
| 6. | 6 | 37 | 65 | 96 | 126 | 157 | 187 | 218 | 249 | 279 | 310 | 340 |
| 7. | 7 | 38 | 66 | 97 | 127 | 158 | 188 | 219 | 250 | 280 | 311 | 341 |
| 8. | 8 | 39 | 67 | 98 | 128 | 159 | 189 | 220 | 251 | 281 | 312 | 342 |
| 9. | 9 | 40 | 68 | 99 | 129 | 160 | 190 | 221 | 252 | 282 | 313 | 343 |
| 10. | 10 | 41 | 69 | 100 | 130 | 161 | 191 | 222 | 253 | 283 | 314 | 344 |
| 11. | 11 | 42 | 70 | 101 | 131 | 162 | 192 | 223 | 254 | 284 | 315 | 345 |
| 12. | 12 | 43 | 71 | 102 | 132 | 163 | 193 | 224 | 255 | 285 | 316 | 346 |
| 13. | 13 | 44 | 72 | 103 | 133 | 164 | 194 | 225 | 256 | 286 | 317 | 347 |
| 14. | 14 | 45 | 73 | 104 | 134 | 165 | 195 | 226 | 257 | 287 | 318 | 348 |
| 15. | 15 | 46 | 74 | 105 | 135 | 166 | 196 | 227 | 258 | 288 | 319 | 349 |
| 16. | 16 | 47 | 75 | 106 | 136 | 167 | 197 | 228 | 259 | 289 | 320 | 350 |
| 17. | 17 | 48 | 76 | 107 | 137 | 168 | 198 | 229 | 260 | 290 | 321 | 351 |
| 18. | 18 | 49 | 77 | 108 | 138 | 169 | 199 | 230 | 261 | 291 | 322 | 352 |
| 19. | 19 | 50 | 78 | 109 | 139 | 170 | 200 | 231 | 262 | 292 | 323 | 353 |
| 20. | 20 | 51 | 79 | 110 | 140 | 171 | 201 | 232 | 263 | 293 | 324 | 354 |
| 21. | 21 | 52 | 80 | 111 | 141 | 172 | 202 | 233 | 264 | 294 | 325 | 355 |
| 22. | 22 | 53 | 81 | 112 | 142 | 173 | 203 | 234 | 265 | 295 | 326 | 356 |
| 23. | 23 | 54 | 82 | 113 | 143 | 174 | 204 | 235 | 266 | 296 | 327 | 357 |
| 24. | 24 | 55 | 83 | 114 | 144 | 175 | 205 | 236 | 267 | 297 | 328 | 358 |
| 25. | 25 | 56 | 84 | 115 | 145 | 176 | 206 | 237 | 268 | 298 | 329 | 359 |
| 26. | 26 | 57 | 85 | 116 | 146 | 177 | 207 | 238 | 269 | 299 | 330 | 360 |
| 27. | 27 | 58 | 86 | 117 | 147 | 178 | 208 | 239 | 270 | 300 | 331 | 361 |
| 28. | 28 | 59 | 87 | 118 | 148 | 179 | 209 | 240 | 271 | 301 | 332 | 362 |
| 29. | 29 |  | 88 | 119 | 149 | 180 | 210 | 241 | 272 | 302 | 333 | 363 |
| 30. | 30 |  | 89 | 120 | 150 | 181 | 211 | 242 | 273 | 303 | 334 | 364 |
| 31. | 31 |  | 90 |  | 151 |  | 212 | 243 |  | 304 |  | 365 |

Current numbers of days of normal years

25/3/81

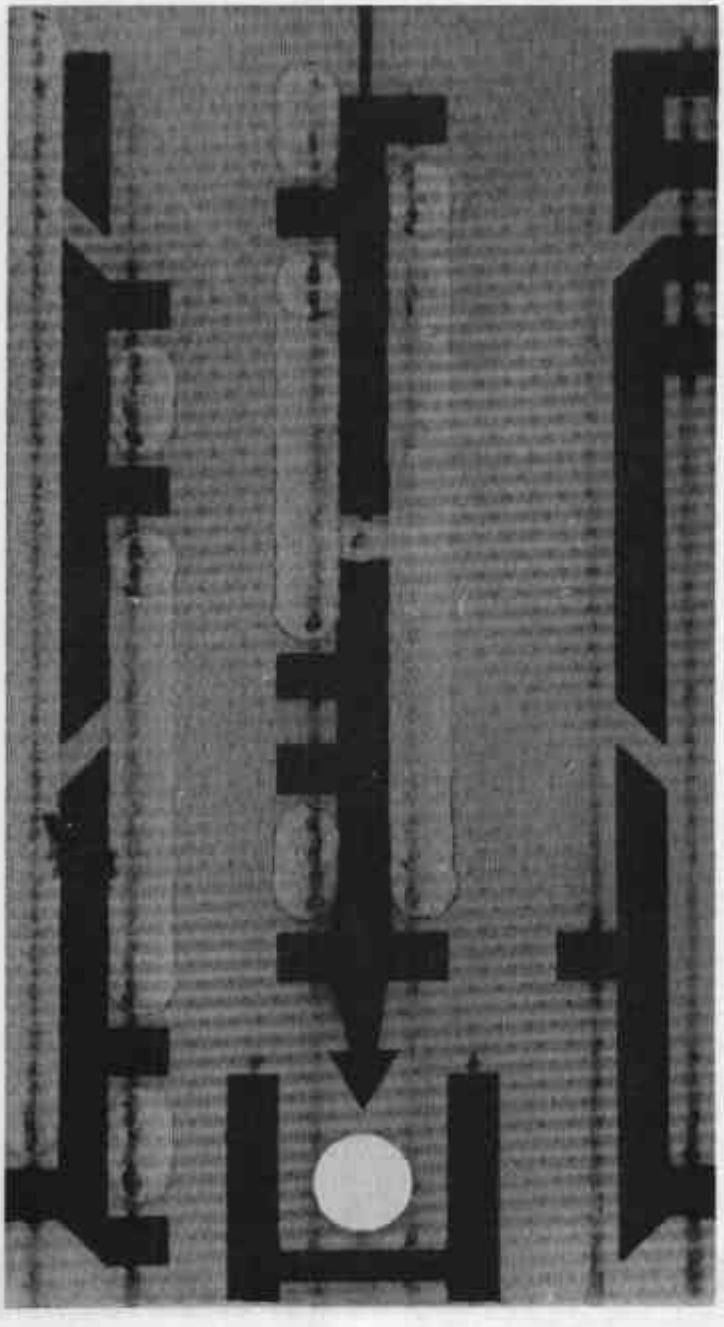
FIGURE PS118 - 7

Date-table

| Date | January | February | March | April | May | June | July | August | September | October | November | December |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 1 | 32 | 61 | 92 | 122 | 153 | 183 | 214 | 245 | 275 | 306 | 336 |
| 2. | 2 | 33 | 62 | 93 | 123 | 154 | 184 | 215 | 246 | 276 | 307 | 337 |
| 3. | 3 | 34 | 63 | 94 | 124 | 155 | 185 | 216 | 247 | 277 | 308 | 338 |
| 4. | 4 | 35 | 64 | 95 | 125 | 156 | 186 | 217 | 248 | 278 | 309 | 339 |
| 5. | 5 | 36 | 65 | 96 | 126 | 157 | 187 | 218 | 249 | 279 | 310 | 340 |
| 6. | 6 | 37 | 66 | 97 | 127 | 158 | 188 | 219 | 250 | 280 | 311 | 341 |
| 7. | 7 | 38 | 67 | 98 | 128 | 159 | 189 | 220 | 251 | 281 | 312 | 342 |
| 8. | 8 | 39 | 68 | 99 | 129 | 160 | 190 | 221 | 252 | 282 | 313 | 343 |
| 9. | 9 | 40 | 69 | 100 | 130 | 161 | 191 | 222 | 253 | 283 | 314 | 344 |
| 10. | 10 | 41 | 70 | 101 | 131 | 162 | 192 | 223 | 254 | 284 | 315 | 345 |
| 11. | 11 | 42 | 71 | 102 | 132 | 163 | 193 | 224 | 255 | 285 | 316 | 346 |
| 12. | 12 | 43 | 72 | 103 | 133 | 164 | 194 | 225 | 256 | 286 | 317 | 347 |
| 13. | 13 | 44 | 73 | 104 | 134 | 165 | 195 | 226 | 257 | 287 | 318 | 348 |
| 14. | 14 | 45 | 74 | 105 | 135 | 166 | 196 | 227 | 258 | 288 | 319 | 349 |
| 15. | 15 | 46 | 75 | 106 | 136 | 167 | 197 | 228 | 259 | 289 | 320 | 350 |
| 16. | 16 | 47 | 76 | 107 | 137 | 168 | 198 | 229 | 260 | 290 | 321 | 351 |
| 17. | 17 | 48 | 77 | 108 | 138 | 169 | 199 | 230 | 261 | 291 | 322 | 352 |
| 18. | 18 | 49 | 78 | 109 | 139 | 170 | 200 | 231 | 262 | 292 | 323 | 353 |
| 19. | 19 | 50 | 79 | 110 | 140 | 171 | 201 | 232 | 263 | 293 | 324 | 354 |
| 20. | 20 | 51 | 80 | 111 | 141 | 172 | 202 | 233 | 264 | 294 | 325 | 355 |
| 21. | 21 | 52 | 81 | 112 | 142 | 173 | 203 | 234 | 265 | 295 | 326 | 356 |
| 22. | 22 | 53 | 82 | 113 | 143 | 174 | 204 | 235 | 266 | 296 | 327 | 357 |
| 23. | 23 | 54 | 83 | 114 | 144 | 175 | 205 | 236 | 267 | 297 | 328 | 358 |
| 24. | 24 | 55 | 84 | 115 | 145 | 176 | 206 | 237 | 268 | 298 | 329 | 359 |
| 25. | 25 | 56 | 85 | 116 | 146 | 177 | 207 | 238 | 269 | 299 | 330 | 360 |
| 26. | 26 | 57 | 86 | 117 | 147 | 178 | 208 | 239 | 270 | 300 | 331 | 361 |
| 27. | 27 | 58 | 87 | 118 | 148 | 179 | 209 | 240 | 271 | 301 | 332 | 362 |
| 28. | 28 | 59 | 88 | 119 | 149 | 180 | 210 | 241 | 272 | 302 | 333 | 363 |
| 29. | 29 | 60 | 89 | 120 | 150 | 181 | 211 | 242 | 273 | 303 | 334 | 364 |
| 30. | 30 | | 90 | 121 | 151 | 182 | 212 | 243 | 274 | 304 | 335 | 365 |
| 31. | 31 | | 91 | | 152 | | 213 | 244 | | 305 | | 366 |

Current numbers of days of leap-years

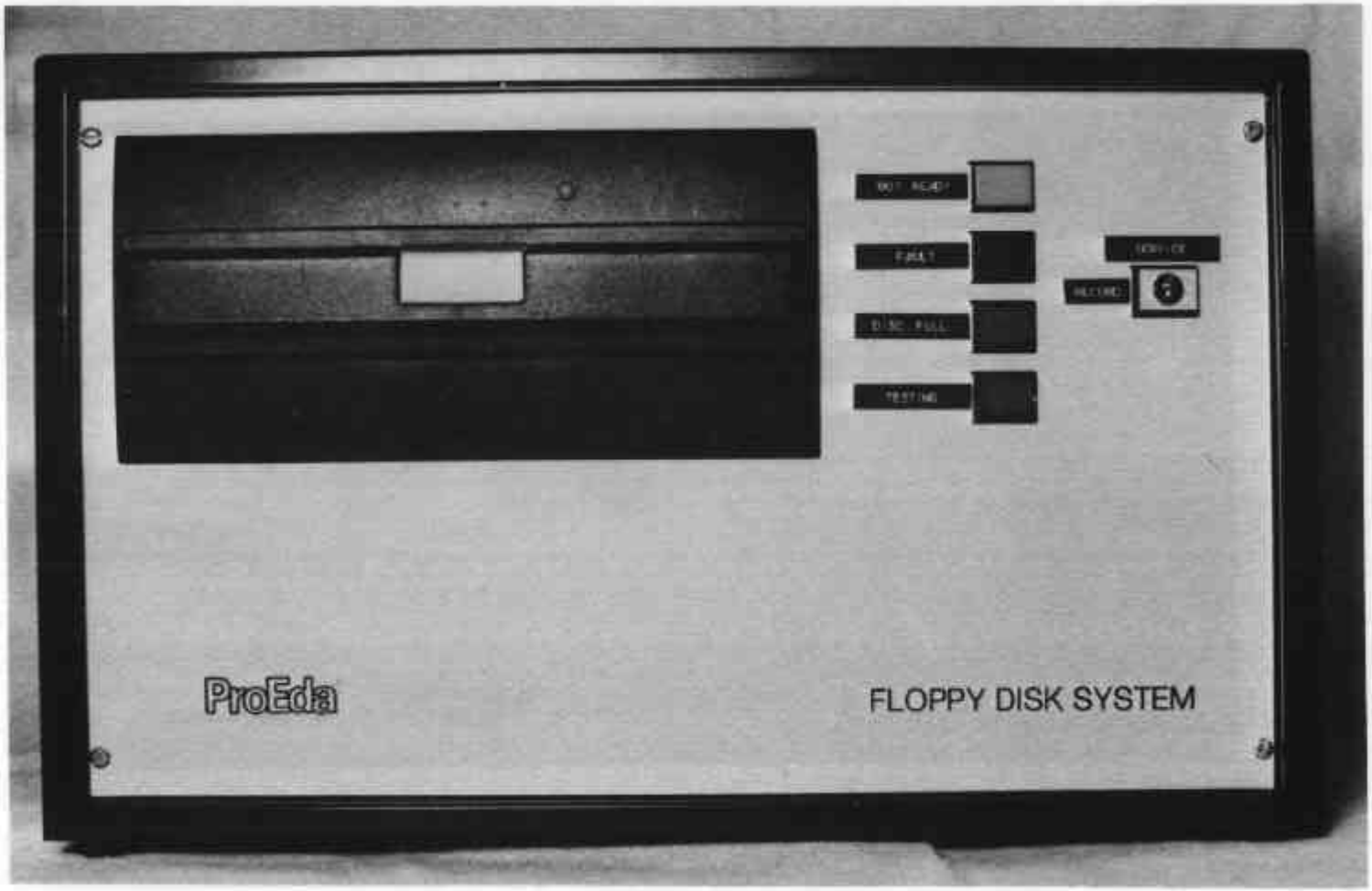
FIGURE PS118 - 8



Customer Credit Card

25/3/81

FIGURE PS118 - 9




Floppy-Disc Recorder

FIGURE PS118 - 10

CUSTOMER A/C NO. : _____

NAME : _____

ADDRESS : _____

_____

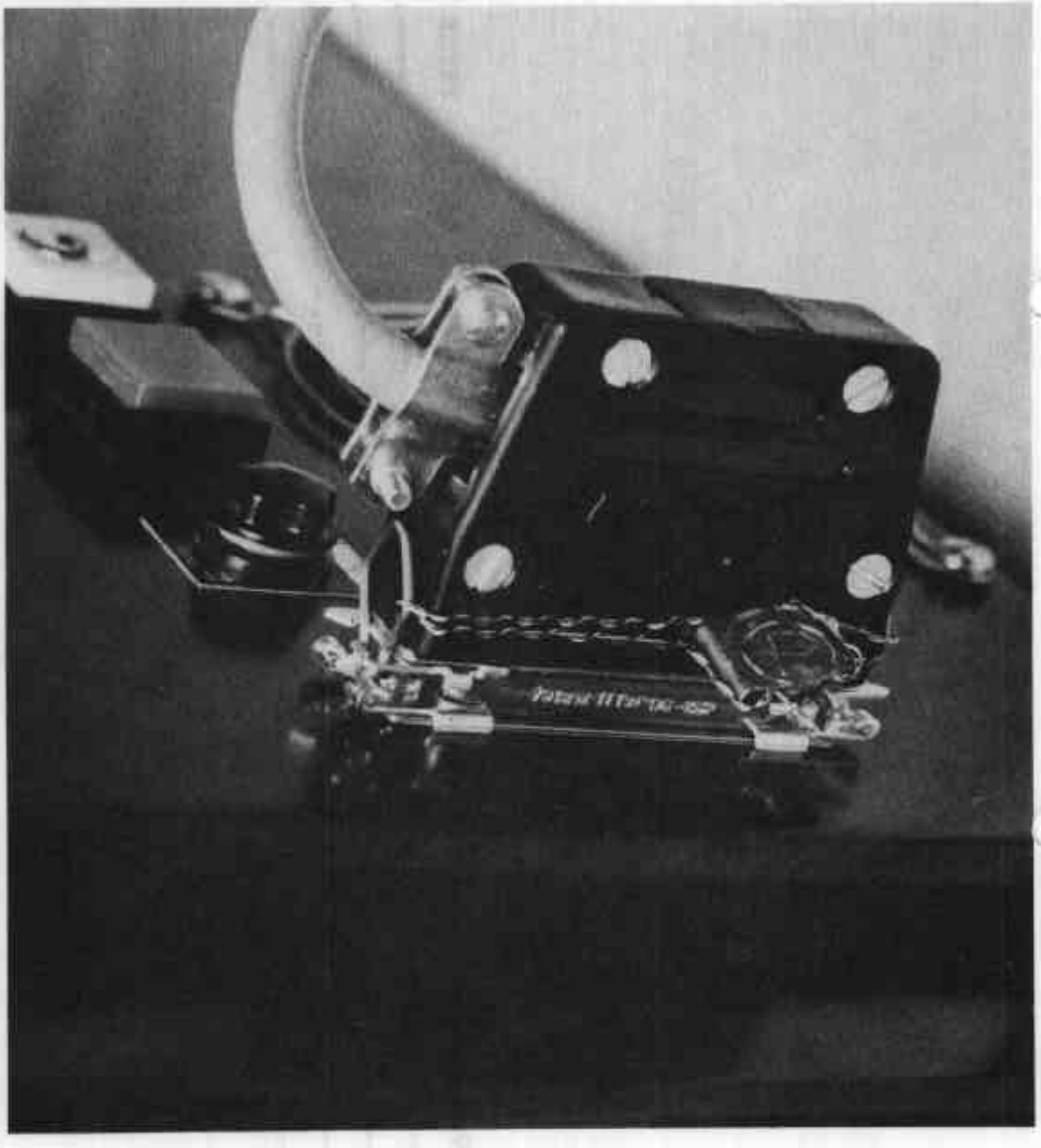
ACCOUNT FROM _____ TO _____

| DATE | DAY | STATION | GRADE | QUANTITY (L) | UNIT PRICE (C/L) | PRICE ($) |
|---|---|---|---|---|---|---|
| ------ | --- | ------- | ----- | ---.-- | ---.- | ----.-- |
| ------ | --- | ------- | ----- | ---.-- | ---.- | ----.-- |
| ------ | --- | ------- | ----- | ---.-- | ---.- | ----.-- |
| ------ | --- | ------- | ----- | ---.-- | ---.- | ----.-- |

TOTAL PRICE ($) : -----.--

Form of Invoice

FIGURE PS118 - 11



Sealing arrangement for interconnecting cable
on Floppy-Disc Recorder

25/3/81