```
                    ┌──────────┐
                    │procedure │
                    └──────────┘
                          │
                          ▼
                     ┌───────┐
                     │ DEC   │ (1)
                     └───────┘
                          │
                          ▼
                     ┌───────┐
                     │ BCR   │ (1)
                     └───────┘
                          │
                          ▼
                   ┌──────────┐
                   │ SEARCH   │ (1)
                   └──────────┘
                          │
                          ▼
```

NLP := NLP − 4 ; PH := −1;

Entry [NLP] := stopper , CBN;

DECTYP
?

0 | real | int | bool   other

                                         ▼
                                      FAIL 86

OWNCD = 1
?

no   yes

NB := CBN;   (SKIP) page 2

CBN := HBN := HBN + 16;

```
┌─────────┐    ⎡ DECSTA , NLP−4            ⎤
│ STACK   │    ⎢                           ⎥
└─────────┘    ⎣ proc begin , NB , PP , 0  ⎦
     │
     ▼
┌─────────┐    ⎡                ⎤
│ COMPIL  │    ⎢  UJ   8191     ⎥
└─────────┘    ⎣                ⎦
     │
     ▼
┌─────────┐
│ REPORT  │ (P)
└─────────┘
     │
     ▼
 ( SKIP )  page 2
```
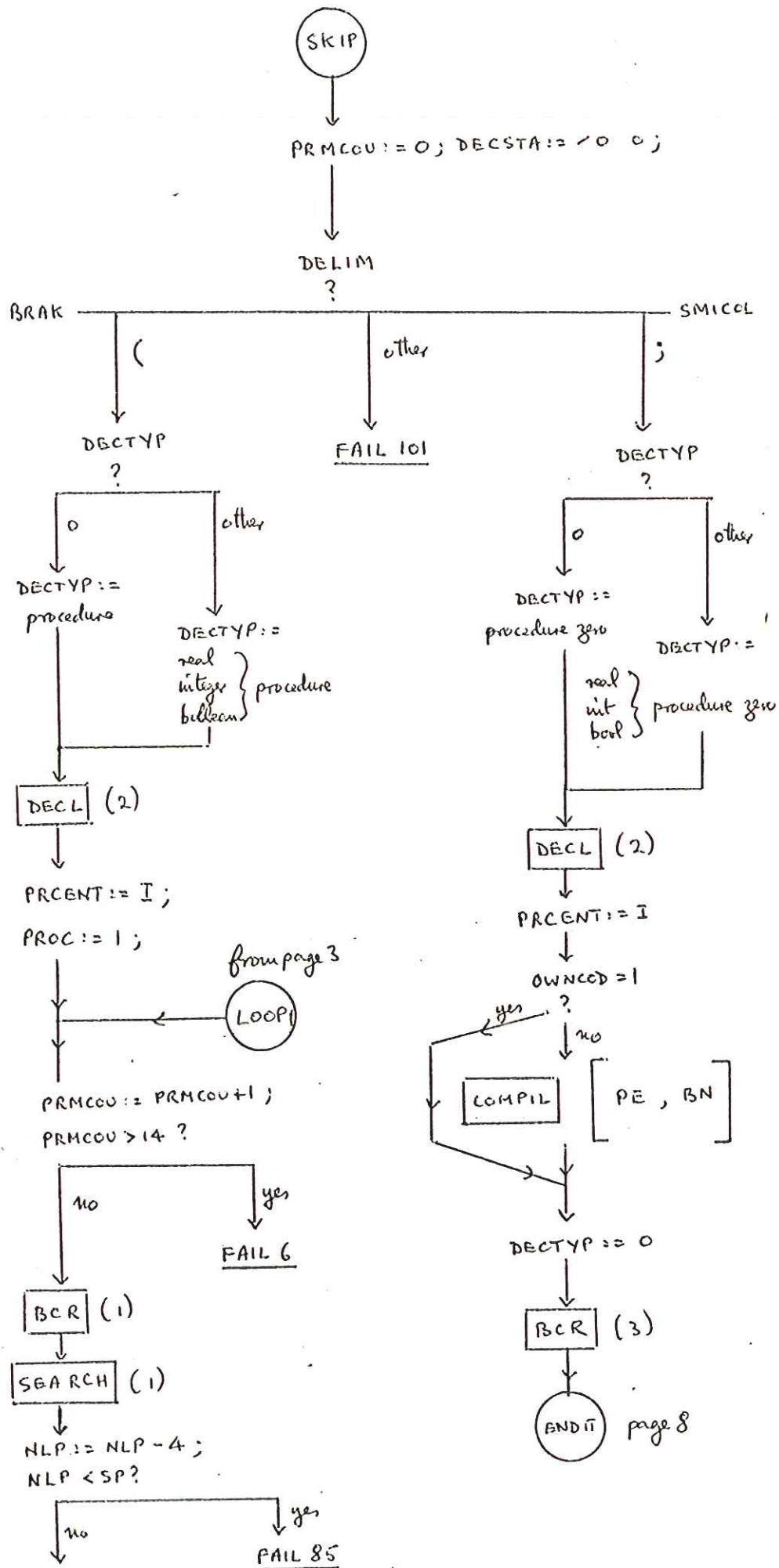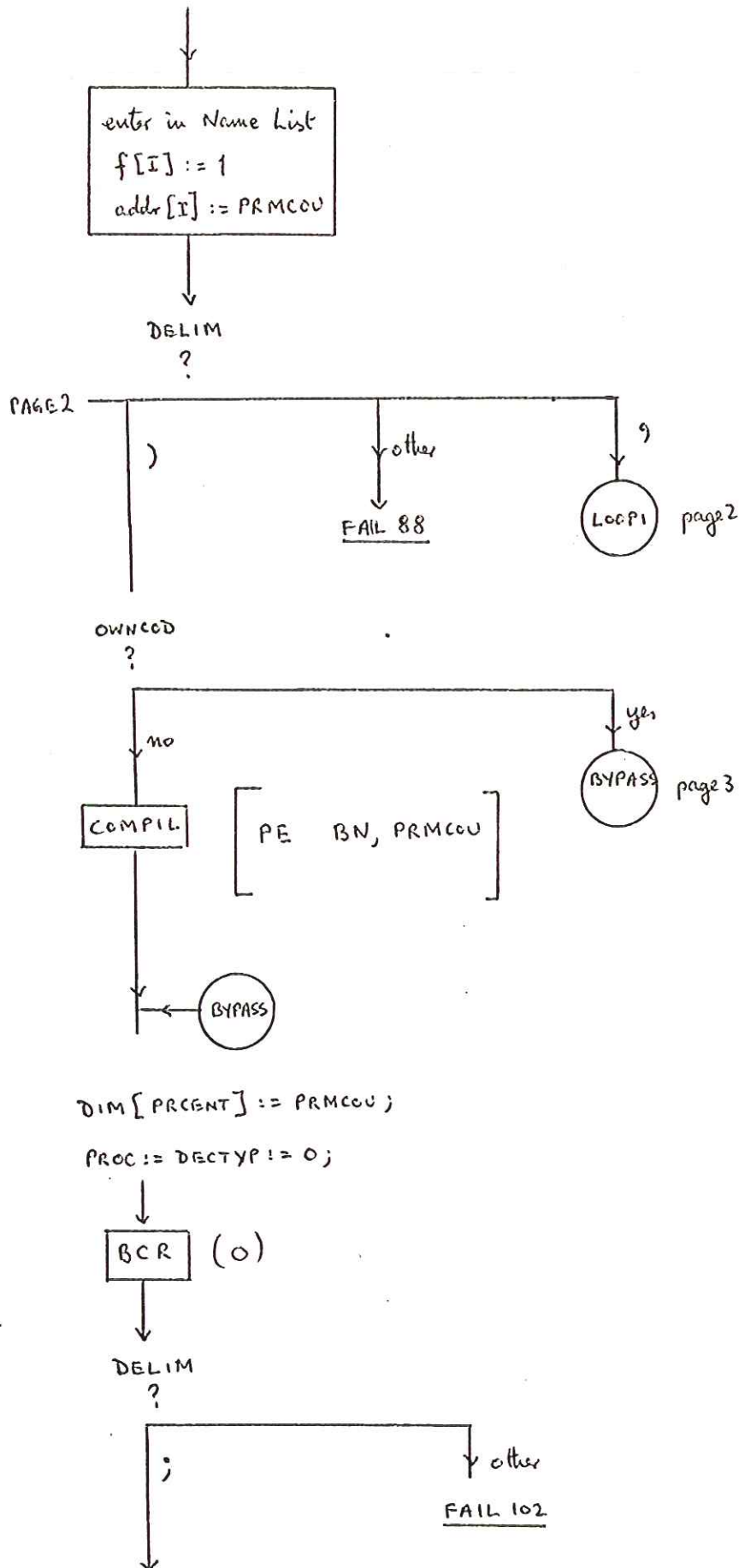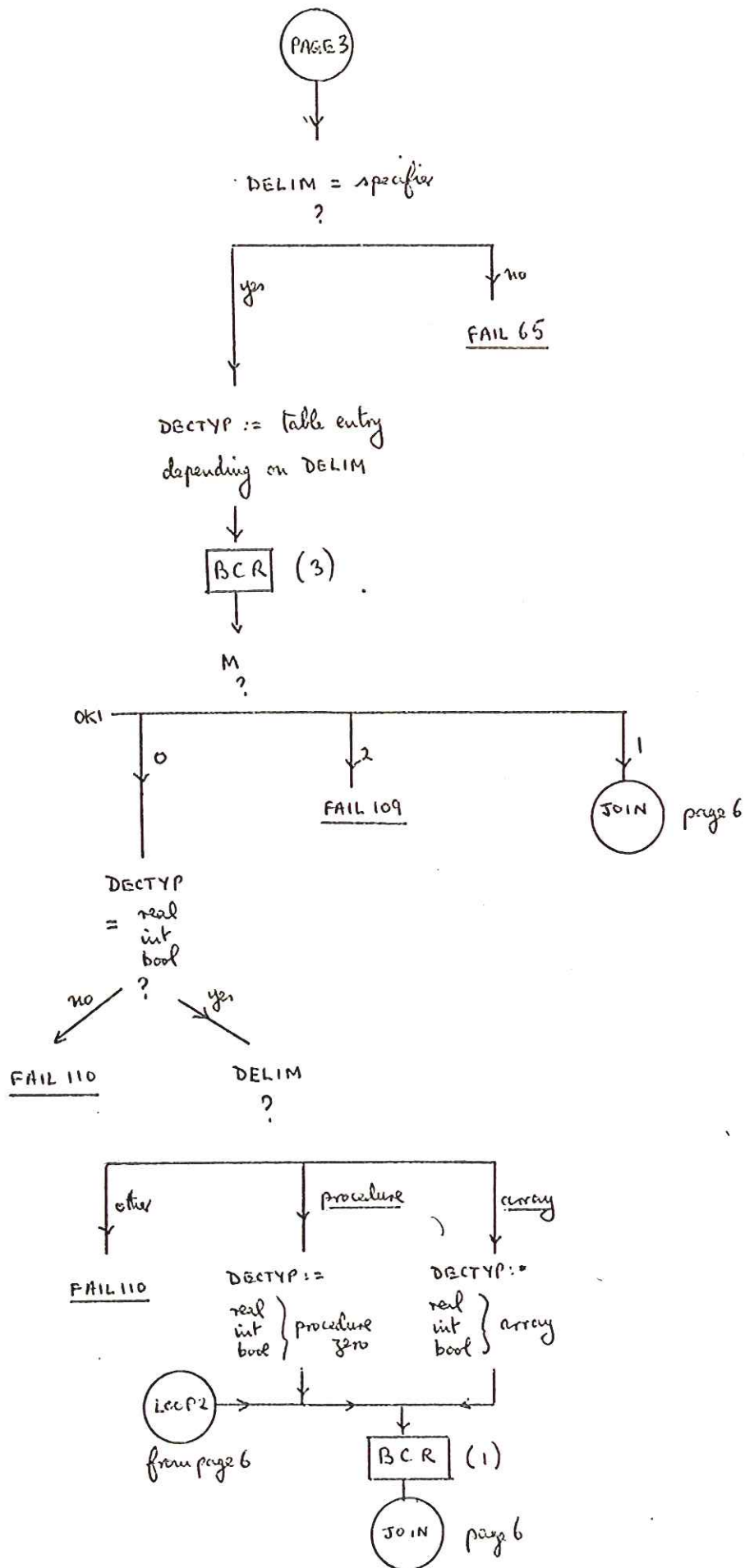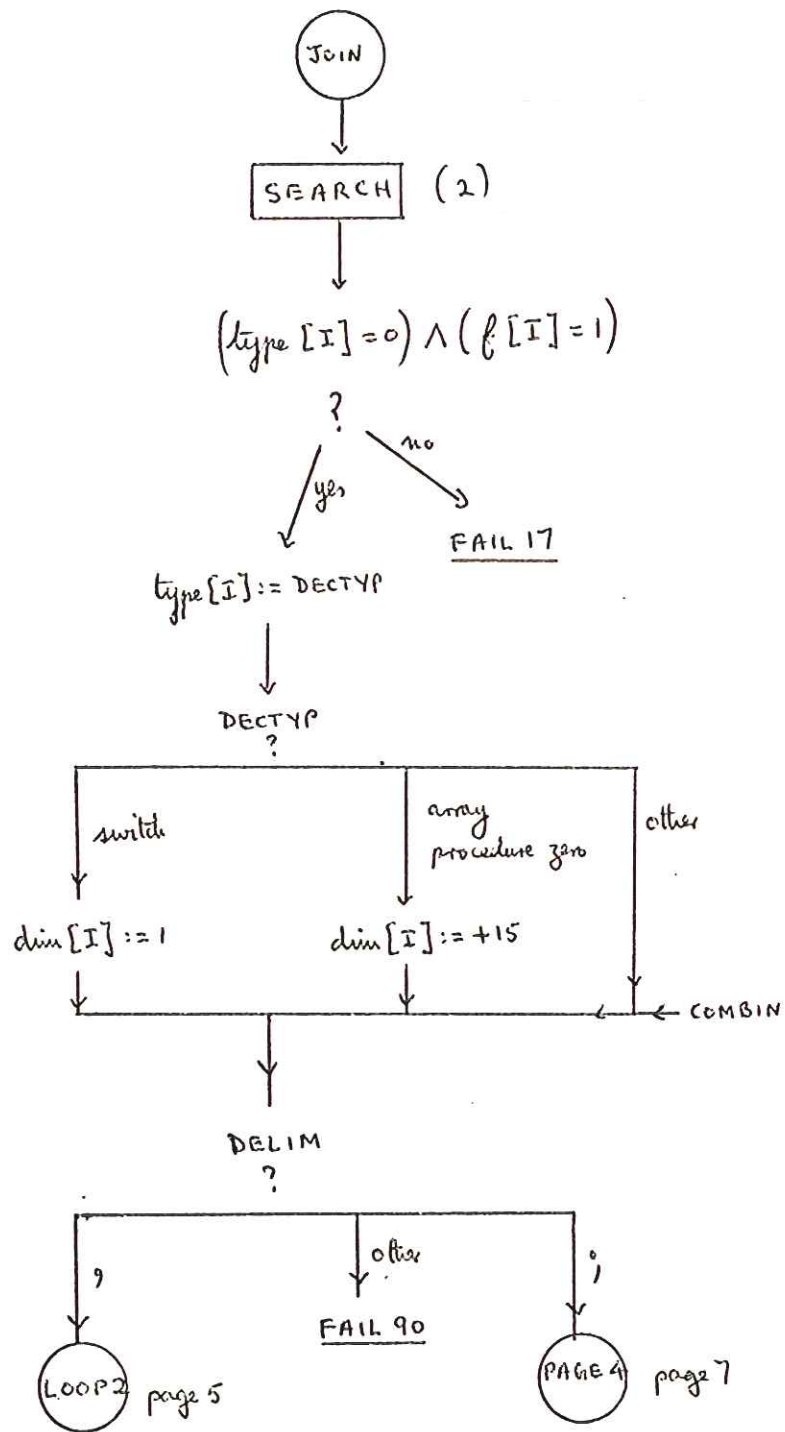
PH is procedure heading marker for FAIL

report procedure name if in report mode

SKIP

PRMCOU := 0 ; DECSTA := < 0 0 ;

DELIM
?

BRAK ———————————————————————— SMICOL

(other   ;

DECTYP   FAIL 101   DECTYP
?   ?

0   other   0   other

DECTYP :=   DECTYP :=
procedure   procedure zero
           DECTYP :=   DECTYP :=
           real   real
           integer } procedure   int } procedure zero
           boolean   bool

DECL (2)   DECL (2)

PRCENT := I ;   PRCENT := I

PROC := 1 ;   from page 3   OWNCOD = 1
                     LOOP   ?
                                        yes   no

PRMCOU := PRMCOU+1 ;   COMPIL   [PE , BN]

PRMCOU > 14 ?

no   yes   DECTYP := 0

            FAIL 6   BCR (3)

BCR (1)   ENDIT page 8

SEARCH (1)

NLP := NLP - 4 ;
NLP < SP ?

no   yes

            FAIL 85

procedure (cont'd)

enter in Name List
f [I] := 1
addr [I] := PRMCOU

DELIM
?

PAGE 2

)

other

FAIL 88

,

LOOP1   page2

OWNCOD
?

no

yes

COMPIL

[PE   BN, PRMCOU]

BYPASS   page 3

BYPASS

DIM [PRCENT] := PRMCOU ;

PROC := DECTYP != 0 ;

BCR   (0)

DELIM
?

;

other

FAIL 102

procedure (cnt'd)

BCR (0)

DELIM
?

(VALUE)

value   other

BCR (1)

SEARCH (2)

$f[I] = 1$
?

NO   YES

FAIL 17 $G[I] := 1;$

DELIM
?

,   other   ;

page4 (VALUE)   FAIL 90

BCR (0)

(PAGE3) page 5

(PAGE 3)

DELIM = specifier
?

yes   no

                              FAIL 65

DECTYP := table entry
depending on DELIM

| BCR | (3)

M
?

OKI   0   2   1

              DECTYP   FAIL 109   (JOIN) page 6
              = real
                int
                bool
              ?

    no   yes

FAIL 110   DELIM
                ?

   other   procedure   array

FAIL 110   DECTYP :=   DECTYP :=
              real }   real }
              int } procedure   int } array
              bool } zero   bool }

(loop 2) | BCR | (1)

from page 6   (JOIN) page 6

(98)

procedure (cont'd)

(JOIN)

| SEARCH | (2)

$$\left(type \, [I] = 0 \right) \wedge \left(\ell \, [I] = 1 \right)$$

?

yes → type $[I] :=$ DECTYP

no → FAIL 17

DECTYP
?

switch → dim $[I] := 1$

array procedure zero → dim $[I] := +15$

other → COMBIN

DELIM
?

, → (LOOP2) page 5

other → FAIL 90

; → (PAGE 4) page 7

procedure (cont'd)

(PAGE 4)

DECTYP := 0

[BCR] (3)

$(M=0) \wedge (DELIM = "specifier")$
?

NO ↙ ↘ yes

(PAGE 3) page 5

W12 := PRCENT

from page 8 (RPT) →

W12 := W12 - 4;
LIVE := 0;

$type [W12] = 0$
?

yes ↙ ↘ no

FAIL 92

$v [W12] = 1$
?

no ↙ ↘ yes

~~LIVE := +16~~

$type [W12] = \begin{cases} switch \\ string \\ procedure \end{cases}$
?

no ↙ ↘ yes

LIVE := +16   FAIL 94

OWNED
?

no ↙ ↘ YES

(OMIT) page 8

$type [W12]$ exists in table ?

yes ↓   ↘ no

FAIL 65

All procedures will be procedure zero at this stage

(100)

$W1 :=$ checking integer

$LIVE := 2^{13} \times (W1 + LIVE)$

type $[W12]$ = array procedure
?

no   yes

$LIVE := LIVE + 8191$

COMPIL $[\quad LIVE \quad]$

OMIT
from page 7

$W12 = NLP$
?

ENDIT
from page 2

yes   no

RPT   page 7

$PH := 0$

DELIM

algol   other

OWNCOD := 0   OUT 2
NLP := PRCENT
DECSTA := 8   0

FCLAPS

BCR   (3)

DELIM
?

other   ;

OUT 2 $N = 0$?

yes   no

OUT   OUT 2
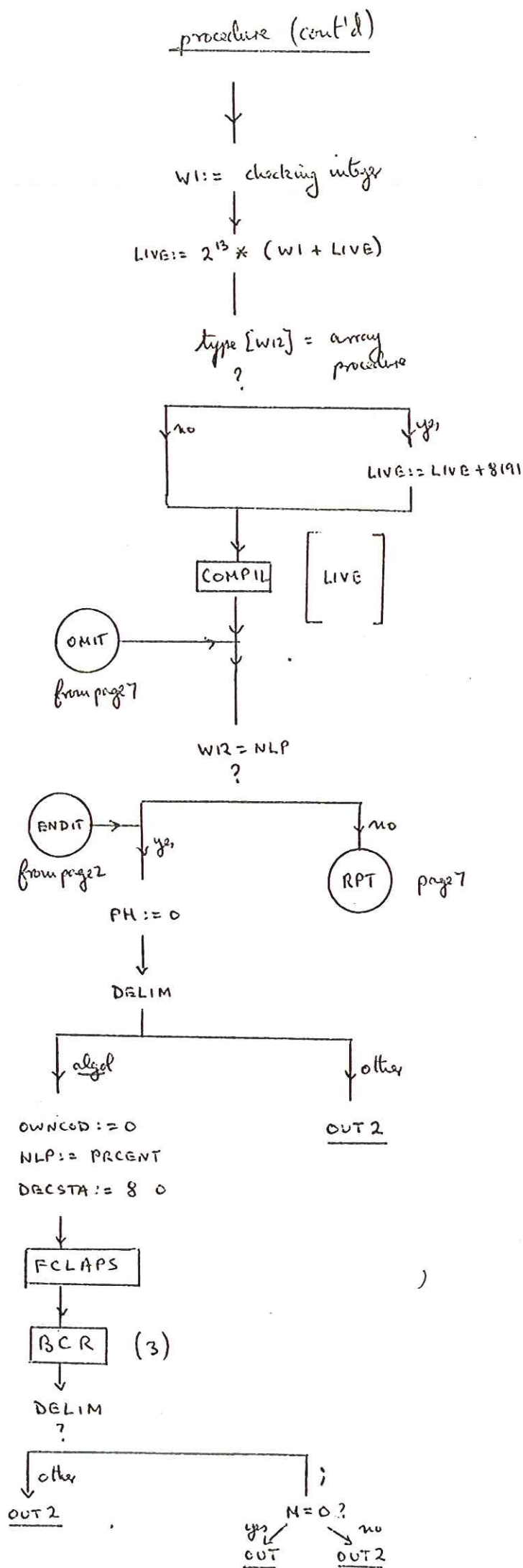
LIVE contains
a
parameter
checking word
see prod manual