

OP_cons ()

```
cons_x = GetLongWord(--CurrentStackPTR);
--CurrentStackPTR;
```

```
Ref. cnt
```

```
gclookup(ADDREF, TopOfStack);
gclookup(ADDREF, cons_x);
```

CDRring NIL

(TopOfStack == NIL_PTR)

```
((ListpDTD->dtd_nextpage != 0)
&&
(GetCONSCount(ListpDTD->dtd_nextpage) > 0))
```

ListpDTD CONSPAGE
1 Free

TOS CONSPAGE

```
new_page = POINTER_PAGE(TopOfStack);
```

On Page

```
(listp(TopOfStack)
&&
(GetCONSCount(new_page) > 0))
```

TOP
1 Free

TOS

Diff. Page

```
TopOfStack = LADDR_from_68k( new_cell )
```

```
gclookup ( DELREF , TopOfStack )
```

```
PC++
```

CONSPAGE

```
new_page = ListpDTD->dtd_nextpage;
new_conspage =
(struct conspage *)Addr68k_from_LPAGE(new_page);
new_cell = GetNewCell_68k(new_conspage);
new_conspage->count --;
new_conspage->next_cell = new_cell->cdr_code ;
```

```
new_cell->car_field = cons_x ;
new_cell->cdr_code = CDR_NIL ;
```

```
ListpDTD->dtd_cnt0++
```

CONSPAGE

```
new_conspage=next_conspage()
```

CONSPAGE

```
new_cell = GetNewCell_68k( new_conspage ) ;
new_conspage->count --;
new_conspage->next_cell = new_cell->cdr_code ;
```

```
new_cell->car_field = cons_x ;
new_cell->cdr_code = CDR_NIL ;
```

```
ListpDTD->dtd_oldcnt++;
```

TOS CONSPAGE

```
new_conspage=
(struct conspage *)Addr68k_from_LPAGE(new_page);
new_cell = GetNewCell_68k( new_conspage ) ;
new_conspage->count --;
new_conspage->next_cell = new_cell->cdr_code ;
```

```
new_cell->car_field = cons_x ;
new_cell->cdr_code = CDR_ONPAGE | (LOLOC(TopOfStack)>>1);
```

```
ListpDTD->dtd_cnt0++
```

CONSPAGE

```
new_conspage=next_conspage()
```

CONSPAGE 2

```
temp_cell = GetNewCell_68k( new_conspage ) ;
new_conspage->next_cell = temp_cell->cdr_code ;
new_cell = GetNewCell_68k( new_conspage ) ;
new_conspage->next_cell = new_cell->cdr_code ;
new_conspage->count = 2;
```

CDR

```
temp_cell->car_field = TopOfStack ;
temp_cell->cdr_code = 0 ;
```

CAR

```
new_cell->car_field = cons_x ;
new_cell->cdr_code
= (LOLOC(LADDR_from_68k(temp_cell)) >> 1) ;
```

```
ListpDTD->dtd_oldcnt++;
```