# FORCOM

This subroutine is called at the end of a for list element to compile the correct object program operation. TAKE and UNSTAK are used to complete the processing of the preceding expression and the top of the stack (TS) is then used to determine between the various kinds of list element.

EXAMPLE     (i)     for C V: = a, .........     simple

             (ii)    for C V: = 1 step 1 until n, ... until

             (iii)   for C V: = a while a <10, ..... while

N.B. if FORCOM is called by ',' this could be the delimiter between dimensions in an array subscript used in a list element.

             (iv)    for C V: = A [1,3] .....       [

In cases (i), (ii) and (iii) the type of the controlled variable is restored from the stack into LOKTYP, and TYPCHK is used to compile a type conversion if necessary. The relevant object program operation is then compiled and a check is made that the top of the stack is for, and an exit is made back to ',' or do.

In case (iv), the number of dimensions is updated and stacked with '[' and a return made to the CENTRAL LOOP, to read the next ALGOL section.

## ERRORS

FAIL 96;    incorrectly constructed for clause.

FAIL 43;    missing ] on array element preceding do.