

ee9 V9 ERRATA

V9.0X CORRECTS THESE ERRORS IN V9.0P.

THE FOLLOWING ARE PROBLEMS WITH THE KIDSGROVE ALGOL SYSTEM,
NOT WITH ee9's EMULATION OF THE KDF9 ARCHITECTURE.

THEY OCCUR ONLY IN OPTIMISED OBJECT PROGRAMS.

- The Kidsgrove system gives wrong results for some programs that contain calls on library routines.

SIGNIFICANCE: MAJOR, PREVENTS CORRECT EXECUTION OF THOSE OBJECT PROGRAMS, WHICH RUN PROPERLY WHEN NOT OPTIMISED. I HOPE THAT A FUTURE RELEASE WILL INCLUDE A NEW VERSION OF THE KIDSGROVE ALGOL SYSTEM THAT MITIGATES THE ABOVE PROBLEM.

- The Kidsgrove system gives incorrect results for some programs containing optimised 'step-until' loops with an iteration count that exceeds 65535. A loop traversing an array would not normally have a problematic iteration count, as the largest physically possible array contains fewer than 32768 elements.
- Optimised 'for' loops evaluate the 'step' and 'until' expressions only once. This makes a difference if the body of the loop exerts a side effect on either of them: the side effect will be inoperative.
- If the body of a optimised 'step-until' loop explicitly changes the controlled variable, the change will not have its intended effect on the course of the iteration.

THESE ARE PERMANENT LIMITATIONS OF OPTIMISED LOOPS,
DUE TO THEIR ITERATION COUNTS BEING HELD IN THE C FIELDS OF Q STORES.