

- 17 -

1 Referring to Figure 4, a pseudo code description
of the feature exchange mechanism using the
EXCHANGE_FEATURES function is illustrated. This mechanism
would be invoked during system initialization prior to
5 use of any of the defined features. The following
conventions are used in Figure 4.

1. Labels are shown in **bold** characters.
2. The described activity is either occurring
10 in the OS environment or in the SPP
environment. The environment is indicated
by use of [OS] or [SPP].
3. Local variables belonging to the [OS]
environment use the suffix "_OS". Similarly,
variables in the [SPP] environment use "_SPP".
- 15 4. Comments are preceded by "%".
5. NEQ represents Not Equal and is a bitwise
comparison operation ignoring Bit0.
6. AND represents a bitwise AND operation or
when used in a conditional test, a logical
20 AND operation.
7. A data word followed by "&<k>[:1]" is
the above mentioned bit set operation. It
sets bit to <k> where k is 0 or 1.

It is appreciated that the functionality of Figure
25 4 closely tracks that of Figures 3(a) and 3(b). The
LOOP section of Figure 4 corresponds to blocks 100-103
of Figure 3(a). The CHECK_LAST section of Figure 4
corresponds to block 104 of Figure 3(a). The RETURN
section of Figure 4 corresponds to Figure 3(b). The
30 feature list is implemented as the array FEATURES_OS
in the MCP and FEATURES_SPP in the SPP.

After performing the operations, the OS has either
faulted due to a feature mismatch or has completed the
exchange of all feature words. If a fault did not occur,
35 both the OS and SPP have identical records of which
features are mutually supported in their respective
arrays. If an optional feature is not supported, it