Patching a Trap

```
// Patching a trap
// An example of patching the GetNewDialog() trap.  This patch
// does nothing but call the real GetNewDialog() trap.

#include <SetUpA4.h>
// Assumes inclusion of <MacHeaders>

#define _GetNewDialog     0xA97C

/* save regs not preserved by THINK C */
#define SaveRegs() \
     asm { movem.l a0-a1/d0-d2,-(sp) }

/* restore regs not preserved by THINK C */
#define RestoreRegs() \
     asm { movem.l (sp)+,a0-a1/d0-d2 }

typedef pascal DialogPtr (*GetNewDialogProcPtr) (short, Ptr, WindowPtr);

GetNewDialogProcPtr gOldGetNewDialog;

extern void GetNewDialogJmp(void);

static pascal DialogPtr GetNewDialogHook(short dlogID, Ptr storage,
                                                  WindowPtr behind)
{
     DialogPtr      dlogPtr;

     SaveRegs();
     SetUpA4();
     dlogPtr = gOldGetNewDialog(dlogID, storage, behind);
     RestoreA4();
     RestoreRegs();
     return dlogPtr;
}

static void InstallPatch(void)
{
     gOldGetNewDialog =
                (GetNewDialogProcPtr)NGetTrapAddress(_GetNewDialog);
                NSetTrapAddress((long)GetNewDialogHook,
                _GetNewDialog);
}
```