```
        org     $8000
init    lea     tps,a3
        movea.l #$18000,a0
        movea.l #$20000,a1
        movea.l #$10000,a5      ;ADDED!!!
        move.b  #4,d2
init2   move.b  #$30,d0
        bsr     delay
        subq.b  #1,d2
        bne     init2
        move.b  #$01, d0
        bsr     delay
        bsr     delay2
        move.b  #$0E,d0
        bsr     delay
        move.b  #$0C,d0
        bsr     delay
        bra     read1   ;
delay2  move.w  #$FFFF,d1
        move.w  #$FFFF,d2
delay3  subq.w  #1,d2
        bne     delay3
delay4  subq.w  #1,d2
        bne     delay4
        rts
;***********************************updated Monday November 22,2004
;***********************************
read1   move.b  $18000,d7
        move.b  d7,d0   ;sdfa
        addi.b  #1,d0
        move.b  d0,$28000
        movea.l #$18002,a0
        movea.l #$8200,a6
        mulu.w  #$4,d7
        adda.l  d7,a6
        jmp     (a6)
tps     movea.l #tpsd,a3
        move.b  #8,d3
        move.b  #$84,d2
        bsr     loop
        clr.b   d3
        movea.l #$18002,a0
rtps    move.b  (a1),d7
        ;equations
        ;
        ;
        move.b  d7,(a5)         ;ADDED!!!!!
        bsr     read
        bra     rtps
map     movea.l #mapd,a3
        move.b  #15,d3
        move.b  #$84,d2
        bsr     loop
        clr.b   d3
        movea.l #$18002,a0
rmap    move.b  (a1),d7
        ;equations
        ;
        ;
        move.b  d7,(a5)         ;ADDED!!!!!
        bsr     read
        bra     rmap
temp1   movea.l #temp1d,a3
```

```
        move.b  #19,d3
        move.b  #$8e,d2
        bsr     loop
        clr.b   d3
        movea.l #$18002,a0
rtemp1  move.b  (a1),d7
        ;equations
        ;
        ;
        move.b  d7,(a5)         ;ADDED!!!!!
        bsr     read
        bra     rtemp1
temp2   movea.l #temp2d,a3
        move.b  #18,d3
        move.b  #$8d,d2
        bsr     loop
        clr.b   d3
        movea.l #$18002,a0
rtemp2  move.b  (a1),d7
        ;equations
        ;
        ;
        move.b  d7,(a5)         ;ADDED!!!!!
        bsr     read
        bra     rtemp2
o2      movea.l #o2d,a3
        move.b  #17,d3
        move.b  #$8e,d2
        bsr     loop
        clr.b   d3
        movea.l #$18002,a0
ro2     move.b  (a1),d7
        ;equations
        ;
        ;
        move.b  d7,(a5)         ;ADDED!!!!!
        bsr     read
        bra     ro2
iat     movea.l #iatd,a3
        move.b  #20,d3
        move.b  #$8f,d2
        bsr     loop
        clr.b   d3
        movea.l #$18002,a0
riat    move.b  (a1),d7
        ;equations
        ;
        ;
        move.b  d7,(a5)         ;ADDED!!!!!
        bsr     read
        bra     riat
null    movea.l #nulld,a3
        move.b  #4,d3
        move.b  #$84,d2
        bsr     loop
        clr.b   d3
        movea.l #$18002,a0
rnull   move.b  (a1),d7
        ;equations
        ;
        ;
        move.b  d7,(a5)         ;ADDED!!!!!
        bsr     read
```

```
        bra     rnull
rand    movea.l #randd,a3
        move.b  #7,d3
        move.b  #$85,d2
        bsr loop
        clr.b   d3
        movea.l #$18002,a0
rrand   move.b  (a1),d7
        ;equations
        ;
        ;
        move.b  d7,(a5)         ;ADDED!!!!!
        bsr     read
        bra     rrand

loop    move.b  (a3)+,d0
        bsr     delayl
        subq.b  #1,d3
        bne     loop
        bsr reset
        rts
read    cmp.b   #99,d7
        bls     showdec
        move.b  #1,d3
showdec move.w  d7,d6
        move.w  #100,d5
        bsr     dodigit
        move.w  #10,d5
        bsr     dodigit
        move.b  d6,d1
        addi.b  #$30,d1
        move.b  d1,d0
        bsr     delay
reset   movea.l #$18000,a0
        move.b  d2,d0
        bsr     delay
        rts
dodigit andi.l  #$ffff,d6
        divu    d5,d6
        move.b  d6,d1
        addi.b  #$30,d1
        cmp.b   #1,d3
        beq     do
        cmp.b   #$30,d1
        bne     do
        move.b  #$80,d0
        bsr     delay
        bra     do2
do      move.b  d1,d0
        bsr     delay
do2     swap    d6
        rts
delay   move.b  #6,d1
delay1  move.b  d0,(a0)
        subq.b  #1,d1
        bne     delay1
        rts
delayl  move.b  #13,d1
        move.b  d0, (a0)
delayl2 subq.b  #1,d1
        bne     delayl2
        rts
        org     $8200
```

```
        bra     tps
        bra     map
        bra     temp1
        bra     temp2
        bra     o2
        bra     iat
        bra     null
        bra     rand
        trap    #9
        org     $8250
tpsd    dc.b    'TPS=',$80,$80,$80,$df
mapd    dc.b    'MAP=',$80,$80,$80,' in. Hg.'
temp1d  dc.b    'Cyl.Head Temp=',$80,$80,$80,$df,'F'
temp2d  dc.b    'Coolant Temp=',$80,$80,$80,$df,'F'
o2d     dc.b    'Oxygen Sensor=',$80,$80,$80
iatd    dc.b    'Intake AirTemp=',$80,$80,$80,$df,'F'
nulld   dc.b    'N','U','L','L'
randd   dc.b    'rand=',$80,$80,$80
        end     init
```