



# DECUS

## PROGRAM LIBRARY

DECUS NO.	8-548
TITLE	LINKS TO PAGE ROUTINE
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DATE	April 4, 1972
SOURCE LANGUAGE	PAL

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DEC 1952



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## LINKS TO PAGE ROUTINE

DECUS Program Library Write-up

DECUS NO. 8-548

Provides convenient numbered pages in Pass 3 listing of assemblers, and for output of Reverse Assembler, without the necessity of punching tape and reading it again through the Page Routine. With MACRO-8, output will halt after body of the listing, and "Continue" must be pressed to get symbol table. Assembler links are furnished in two versions each, with main program in either field 1 or field 0.

/  
 /PATCH TO LINK THE REVERSE ASSEMBLER TO THE  
 /PAGE ROUTINE AT \*6000  
 /THIS LINK MAY BE USED WITH PAGE ROUTINE AND MAIN  
 /PROGRAM IN THE SAME FIELD.  
 /FROM DATA RESEARCH ASSOCIATES, WAYLAND, MASS.  
 /BY LEENDERT PAUL GEFFEN

\*6026  
 6026 5774 P1,JMP I L1  
 6027 7402 HLT /ERROR HALT  
 6030 1376 TAD S2

\*6052  
 6052 5775 P2,JMP I L2  
 6053 7402 HLT /ERROR HALT  
 6054 1376 TAD S2

\*6174  
 6174 6261 L1,R1  
 6175 6272 L2,R2  
 6176 0000 S2,0

\*6250  
 6250 7450 S1,SNA  
 6251 5274 JMP I3  
 6252 3703 DCA I L3  
 6253 1305 H1,TAD S3  
 6254 7450 SNA  
 6255 5704 JMP I L4  
 6256 7700 SMA CLA  
 6257 5701 JMP I I1  
 6260 5702 JMP I I2

6261 1305 R1,TAD S3  
 6262 7450 SNA  
 6263 5267 JMP A3  
 6264 7326 CLA CLL CML RTL

6265 3305 B,DCA S3  
 6266 5677 JMP I D1

6267 7326 A3,CLA CLL CML RTL  
 6270 3305 DCA S3  
 6271 5253 JMP H1

6272 7330 R2,CLA CLL CML RAR  
 6273 5265 JMP B

6274 3305 I3,DCA S3  
 6275 7404 OSR  
 6276 5700 JMP I D2  
 6277 0031 D1,A1+3  
 6300 0236 D2,A2+1  
 6301 6030 I1,P1+2  
 6302 6054 I2,P2+2  
 6303 6176 L3,S2  
 6304 6000 L4,6000  
 6305 0000 S3,0

/START OF PAGE ROUTINE

0235 5430 \*0235  
A2, JMP I L5

0026 5430 \*0026  
A1, JMP I L5  
0027 7402 HLT /ERROR HALT  
0030 6250 L5, S1

A1 0026  
A2 0235  
A3 6267  
E 6265  
D1 6277  
D2 6300  
H1 6253  
I1 6301  
I2 6302  
I3 6274  
L1 6174  
L2 6175  
L3 6303  
L4 6304  
L5 0030  
P1 6026  
P2 6052  
R1 6261  
R2 6272  
S1 6250  
S2 6176  
S3 6305

P

/

/

/PATCH TO LINK PAL-III TO THE PAGE RROUTINE AT \*6000

/

FIELD 1

\*6026

6026 5774 P1,JMP I L1  
6027 7402 HLT /ERROR HALT  
6030 1376 TAD S2

\*6052

6052 5775 P2,JMP I L2  
6053 7402 HLT /ERROR HALT  
6054 1376 TAD S2

\*6174

6174 6261 L1,R1  
6175 6273 L2,R2  
6176 0000 S2,0

\*6250

6250 7450 S1,SNA  
6251 5275 JMP I3  
6252 3705 DCA I L3  
6253 1307 R1,TAL S3  
6254 7450 SNA  
6255 5706 JMP I L4  
6256 7700 SNA CLA  
6257 5703 JMP I I1  
6260 5704 JMP I I2

6261 1307 R1,TAL S3  
6262 7450 SNA  
6263 5270 JMP A3  
6264 7326 CLA CLL CML RTL

6265 3307 B,DCA S3  
6266 6203 CDF CIF  
6267 5701 JMP I D1

6270 7326 A3,CLA CLL CML RTL  
6271 3307 DCA S3  
6272 5253 JMP H1

6273 7330 R2,CLA CLL CML RAR  
6274 5265 JMP B

6275 3307 I3,DCA S3  
6276 7404 OSR  
6277 6203 CDF CIF  
6300 5702 JMP I D2  
6301 0365 D1,A1+3  
6302 0215 D2,A2+1  
6303 6030 I1,P1+2  
6304 6054 I2,P2+2  
6305 6176 L3,S2  
6306 6000 L4,6000  
6307 0000 S3,0

/START OF PAGE ROUTINE

FIELD 0

0214 5362 \*0214  
A2, JMP A1

0362 6213 \*0362  
A1, CDF CIF 10  
0363 5764 JMP I .+1  
0364 6250 S1

A1 0362  
A2 0214  
A3 6270  
C 6265  
D1 6301  
D2 6302  
H1 6253  
I1 6303  
I2 6304  
I3 6275  
L1 6174  
L2 6175  
L3 6305  
L4 6306  
P1 6026  
P2 6052  
R1 6261  
R2 6273  
S1 6250  
S2 6176  
S3 6307

/  
/PATCH LINKING PAL III ON PAGE ONE TO PAGE ROUTINE AT \*06000  
FIELD 0

\*6026

6026 5774 P1,JMP I L1  
6027 7402 HLT /ERROR HALT  
6030 1376 TAD S2

\*6052

6052 5775 P2,JMP I L2  
6053 7402 HLT /ERROR HALT  
6054 1376 TAD S2

\*6174

6174 6261 L1,R1  
6175 6273 L2,R2  
6176 0000 S2,0

\*6250

6250 7450 S1,SNA  
6251 5275 JMP I3  
6252 3705 DCA I L3  
6253 1307 R1,TAD S3  
6254 7450 SNA  
6255 5706 JMP I L4  
6256 7700 SMA CLA  
6257 5703 JMP I I1  
6260 5704 JMP I I2

6261 1307 R1,TAD S3  
6262 7450 SNA  
6263 5270 JMP A3  
6264 7326 CLA CLL CML RTL

6265 3307 B,DCA S3  
6266 6213 CDF CIF 10  
6267 5701 JMP I D1

6270 7326 A3,CLA CLL CML RTL  
6271 3307 DCA S3  
6272 5253 JMP H1

6273 7330 R2,CLA CLL CML RAR  
6274 5265 JMP B

6275 3307 I3,DCA S3  
6276 7404 OSR  
6277 6213 CDF CIF 10  
6300 5702 JMP I D2  
6301 0365 D1,A1+3  
6302 0215 D2,A2+1  
6303 6030 I1,P1+2  
6304 6054 I2,P2+2  
6305 6176 L3,S2  
6306 6000 L4,6000  
6307 0000 S3,0

/START OF PAGE ROUTINE

FIELD 1



0214 5362 \*0214  
A2, JMP A1

0362 6203 \*0362  
A1, CDF CIF  
0363 5764 JMP I .+1  
0364 6250 S1

A1 0362  
A2 0214  
A3 6270  
B 6265  
D1 6301  
D2 6302  
H1 6253  
I1 6303  
I2 6304  
I3 6275  
L1 6174  
L2 6175  
L3 6305  
L4 6306  
P1 6026  
P2 6052  
R1 6261  
R2 6273  
S1 6250  
S2 6176  
S3 6307

P

/

/

/PATCH TO LINK MACRO-8 TO THE PAGE ROUTINE AT \*6000

/

FIELD 1

\*6026  
6026 5774 P1,JMP I L1  
6027 7402 HLT /ERROR HALT  
6030 1376 TAD S2

\*6052  
6052 5775 P2,JMP I L2  
6053 7402 HLT /ERROR HALT  
6054 1376 TAD S2

\*6174  
6174 6261 L1,R1  
6175 6273 L2,R2  
6176 0000 S2,0

\*6250  
6250 7450 S1,SNA  
6251 5275 JMP I3  
6252 3705 DCA I L3  
6253 1307 H1,TAD S3  
6254 7450 SNA  
6255 5706 JMP I L4  
6256 7700 SMA CLA  
6257 5703 JMP I I1  
6260 5704 JMP I I2

6261 1307 R1,TAD S3  
6262 7450 SNA  
6263 5270 JMP A3  
6264 7326 CLA CLL CML RTL

6265 3307 B,DCA S3  
6266 6203 CDF CIF  
6267 5701 JMP I D1

6270 7326 A3,CLA CLL CML RTL  
6271 3307 DCA S3  
6272 5253 JMP H1

6273 7330 R2,CLA CLL CML RAR  
6274 5265 JMP B

6275 3307 I3,DCA S3  
6276 7404 OSR  
6277 6203 CDF CIF  
6300 5702 JMP I D2  
6301 2604 D1,A1+3  
6302 0214 D2,A2+1  
6303 6030 I1,P1+2  
6304 6054 I2,P2+2  
6305 6176 L3,S2  
6306 6000 L4,6000  
6307 0000 S3,0

/START OF PAGE ROUTINE

FIELD 0

0005 2601 \*0005  
A0,A1  
  
0213 5405 \*0213  
A2,JMP I A0  
  
2601 6213 \*2601  
A1,CDF CIF 10  
2602 5603 JMP I .+1  
2603 6250 S1

A0 0005  
A1 2601  
A2 0213  
A3 6270  
B 6265  
D1 6301  
D2 6302  
H1 6253  
I1 6303  
I2 6304  
I3 6275  
L1 6174  
L2 6175  
L3 6305  
L4 6306  
P1 6026  
P2 6052  
R1 6261  
R2 6273  
S1 6250  
S2 6176  
S3 6307

P

/PATCH TO LINK MACRO-8 IN FIELD 1 TO PAGE ROUTINE AT \*06000  
FIELD 0

\*6026

6026 5774 P1,JMP I L1  
6027 7402 HLT /ERROR HALT  
6030 1376 TAD S2

\*6052

6052 5775 P2,JMP I L2  
6053 7402 HLT /ERROR HALT  
6054 1376 TAD S2

\*6174

6174 6261 L1,R1  
6175 6273 L2,R2  
6176 0000 S2,0

\*6250

6250 7450 S1,SNA  
6251 5275 JMP I3  
6252 3705 DCA I L3  
6253 1307 H1,TAD S3  
6254 7450 SNA  
6255 5706 JMP I L4  
6256 7700 SMA CLA  
6257 5703 JMP I I1  
6260 5704 JMP I I2  
  
6261 1307 R1,TAD S3  
6262 7450 SNA  
6263 5270 JMP A3  
6264 7326 CLA CLL CML RTL

6265 3307 B,DCA S3  
6266 6213 CDF CIF 10  
6267 5701 JMP I D1

6270 7326 A3,CLA CLL CML RTL  
6271 3307 DCA S3  
6272 5253 JMP H1

6273 7330 R2,CLA CLL CML RAR  
6274 5265 JMP B

6275 3307 I3,DCA S3  
6276 7404 OSR  
6277 6213 CDF CIF 10  
6300 5702 JMP I D2  
6301 2604 D1,A1+3  
6302 0214 D2,A2+1  
6303 6030 I1,P1+2  
6304 6054 I2,P2+2  
6305 6176 L3,S2  
6306 6000 L4,6000  
6307 0000 S3,0

/START OF PAGE ROUTINE

FIELD 1

```

0005 2601 *0005
        A0,A1

0213 5405 *0213
        A2,JMP I A0

2601 6203 *2601
        A1, CDF CIF
2602 5603 JMP I .+1
2603 6250 S1

```

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A0      0005
A1      2601
A2      0213
A3      6270
B       6265
D1      6301
D2      6302
H1      6253
I1      6303
I2      6304
I3      6275
L1      6174
L2      6175
L3      6305
L4      6306
P1      6026
P2      6052
R1      6261
R2      6273
S1      6250
S2      6176
S3      6307

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