

# Program for CNC Keyway Broaching

For OKUMA CNC MILL

**Try using this format to reduce programming time.  
Just enter your broach information in the fields shown.**

%  
BROACH MAIN .MIN

( USE A WORK OFFSET FOR BROACH TOOL BY IT SELF)  
(YOU CAN ADJUST THE LOCATION IN X OR Y DEPENDING ON  
KEYWAY LOCATION)  
(ALSO THE CODE IS WRITTEN FROM CENTER OF HOLE)  
(THIS SAMPLE IS WRITTEN TO CUT KEY WAY AT 12 O ' CLOCK)  
(THIS IS 2 FILES ONE IS MAIN PROGRAM ONE IS SUB PROGRAM)

G00 Z20.  
T\_\_ M06 (ENTER YOUR BROACH TOOL # HERE)

G15 H59  
G00 G90 X0 Y0  
M05  
M19  
G56 H\_\_ Z1.0 (ENTER HEIGHT OFF-SET NUMBER HERE)  
Z0.5  
M08

(THE Q NUMBER # MUST BE THE TOTAL DEPTH OF KEY WAY  
DIVIDED BY THE D.O.C.)  
(IE... IF KEYWAY IS .130 DEEP AND D.O.C. IS .001 THEN = 130 )  
(.130 / .001 = 130 )  
( Q = TOTAL DEPTH / D.O.C. )

N001 PSELECT SUB.MIN Q130 ( \*\*\* ENTER Q DIGITS HERE NO SPACE  
NO DECIMAL)

G00 G90 Z20. M09  
G28 Y20.  
M30  
%

%  
SUB.MIN

G00 G91 Y.001 (\*\* YOU CAN CHANGE TO X IF KEYWAY IS IN THAT  
DIRECTION)

G01 G90 Z\_\_\_\_\_ F\_\_\_\_\_ (END POINT -Z OF BROACH & FEED RATE  
IPM)

G00 G91 Y -.300 (\*\* THIS MUST BE SAME LETTER AS PREVIOUS  
MOVE X OR Y )  
(\*\* MUST BE OPPOSITE SIGN TOO + OR -)  
(VALUE MUST BE LARGER THAN TOTAL DEPTH OF KEY WAY )

G90 Z.5  
G91 Y.300 (\*\* THIS VALUE MUST MATCH PREVIOUS LETTER AND # )  
(BUT IT WILL BE OPPOSITE SIGN + OR - )

GOTO N001  
%

