**AUTO:** AU, START FROM, TO, DRY RUN, DIRECT BLOCK START
START FROM: LINE NUMBER TO BEGIN EXECUTION FROM
TO: LINE NUMBER TO END EXECUTION AT
DRY RUN OPT: 1=(G0)150ipm (G1)AS PROG, 2=(G0)150ipm, 3=(G0)300ipm (G1)75ipm
DIR.BLK.START: OPT: 0=PROCESS PROGRAM FROM BEGINNING & EXECUTE AT START FROM
1=BEGIN EXECUTION AT START FROM, WITH NO PROCESSING BEFORE
LINE NUMBER = PROCESS FROM LINE NUMBER & BEGIN EXECUTION AT START FROM

**BACKLASH:** BL, AXIS #, AMOUNT AT CENTER, AT NEGATIVE END, AT POSITIVE END
AXIS #: X=1 Y=2 Z=3 A=4 B=5 / AMOUNT IS IN TENTHS: i.e. 10=.0010

**CHANGE DEVICE:** CD, BAUD RATE, LINE FEED OPTION, ECHO OPTION, DEVICE OPTION
BAUD RATE: 1=110 2=150 3=300 4=6-- 5=1200 6=2400 7=4800 8=9600 9=19200
10=38400 11=57600 12=115200
LINE FEED OPT: 0=LINE FEEDS, 1=NO LINE FEEDS
ECHO OPT: 0=ECHO, 1=NO ECHO
DEVICE OPT: 0=EXTERNAL, 1=INTERNAL

**CHANGE PROGRAM LINE:** CH, FROM, THROUGH

**COLD START:** CS

**COPY PROGRAM LINES:** CO, FROM, THROUGH, TO JUST AFTER

**DELETE PROGRAM LINE:** DE, FROM, THROUGH

**DIAGNOSTIC MODE:** DI (TRAINED MAINTENANCE PERSONNEL ONLY)

**DNC (DNCX):** DNC (DNCX), VIDEO OPTION, ERROR OPTION, DRY RUN, START LINE NUMBER
VIDEO OPT: 1=SCREEN
ERROR OPT: 1=DISABLES ERROR CHECKING
DRY RUN OPT: 1=(G0)150ipm (G1)AS PROG, 2=(G0)150ipm, 3=(G0)300ipm (G1)75ipm
START LINE NUMBER: SPECIFIES WHICH LINE TO BEGIN EXECUTION

**DISPLAY FIXTURE OFFSETS:** DF

**DISPLAY TOOL TABLE:** DT

**DISPLAY TIME TABLE:** DTT

**DRAW:** DR (DRAWS THE CURRENTLY ACTIVE PROGRAM) [-4 and -5 ONLY]

**FIXTURE OFFSET:** FO, NUMBER, (X AMOUNT), (Y AMOUNT), (Z AMOUNT)

**HOME ALL AXES:** HO

**INSERT PROGRAM LINES:** IN, FROM, SEQUENCE INCREMENT

**LEARN MODE:** LE, FIRST BLOCK NUMBER, INCREMENT, TOOL NUMBER

**LIST PROGRAM LINES:** LI, FROM, THROUGH
[DISPLAY SCROLL, SPEED CONTROL: 1(SLOWEST) – 9(FASTEST), 0(PAUSE SCROLL)]

**MACRO:** MA

**MANUAL DATA INPUT:** MD

**MEMORY FREE:** ME

**MENU:** MU
NEW PROGRAM: NE (THIS DELETES THE CURRENTLY ACTIVE PROGRAM)
NUMBER PROGRAM LINES: NU, INCREMENT FOR LINE NUMBERS
PAGE EDITOR: PA, OPTIONAL FROM
PROGRAM MAINTENANCE: PR, OPTIONAL PROGRAM NUMBER
PUNCH PROGRAM: PU, DATA OPTION, CODE OPTION, TTY OPTION
  DATA OPT: 0=CURRENTLY ACTIVE PROGRAM & OFFSETS, 1=OFFSET ONLY
  DATA OPT: 2=CURRENTLY ACTIVE PROGRAM, 3=ALL PROGRAMS IN MEMORY
  4=PUNCH OUT PARAMETERS
  CODE OPT: 0=ASCII, 1=EIA
  TTY OPT: 0=COMPUTERS, 3=LEADER, PROGRAM, TRAILER
REINITIALIZE: RI
  1) DELETE THE TOOL TABLE & RESET THE TURRET
  2) DELETE THE FIXTURE OFFSET TABLE
  3) DELETE THE ENTIRE PROGRAM LIBRARY, CURRENT PROGRAM & RESET TURRET
RESET HOME TO COLD START POSITION: SETCS
RESET TOOL CHANGER: SETTO (SETS CURRENT TURRET POSITION TO ONE)
RESET SYSTEM PARAMETERS: SETP (AXES MUST BE AT CS POSITION)
SET (AXIS): SETX or SETY or SETZ or SETA or SETB or SETH
SET LENGTH OFFSET: SL, TOOL NUMBER, OPTIONAL CHANGE VALUE
SUM PROGRAM: SU, DISPLAY FROM, THROUGH, CRC OPTION, DISPLAY OPTION
  DISPLAY FROM: DISPLAY DATA STARTING AT DISPLAY FROM NUMBER
  THROUGH: STOP DISPLAYING DATA AT THROUGH NUMBER
  CRC OPT: 1=IGNORE G41 & G42
  DISPLAY OPT: 0=ERROR MESSAGES ONLY
  OPT: 1=INCREMENTAL MOVES & ERROR MESSAGES
  OPT: 2=INCREMENTAL MOVES, ERROR MESSAGES & ABSOLUTE POSITIONS
  OPT: 3=CURRENT G CODE STATUS AND ALL OTHER OPTIONAL INFORMATION
  [DISPLAY SCROLL, SPEED CONTROL: 1(SLOWEST) – 9(FASTEST), 0[PAUSE SCROLL]]
SURVEY: SV (TRAINED MAINTENANCE PERSONNEL ONLY)
TAPE (PROGRAM) INPUT: TA, DEVICE OPTION, ERROR OPTION, ADD AT END
  DEVICE OPT: 0=INTERNAL TAPE READER
  OPT: 1=INPUT THROUGH RS-232 PORT
  ERROR OPT: 1=IF DATA HAS PARITY ERRORS
  OPT: 2=TO IGNORE ERRORS AND GIVE ERROR COUNT
  OPT: 3=TO ACCEPT DATA FROM OTHER CNC CONTROLS
  ADD AT END: 1=ALLOWS DATA TO BE ADDED TO THE END OF CURRENTLY ACTIVE PROGRAM
TOOL CHANGER OPEN: TC, 1 (OPENS TOOL CHANGER AT CURRENT POSITION)
TOOL DATA INPUT: TO, TOOL NUMBER, DIAMETER, LENGTH OFFSET
UTILITIES: UT (FOR SETTING TOOL & FIXTURE OFFSETS, or FOR TESTING PROBES & PALLET UTILITIES)
  *ALTERNATE USE: UT, # (# SPECIFIES A TOOL NUMBER TO PICK UP FROM THE TURRET)
VERIFICATION OF PUNCHED TAPE: VT, 1