10. PROGRAM TESTING

10.1 STEP BY STEP CODE EXECUTION

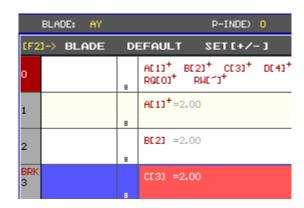RUN TOP [F7]   RUN LINE [F8]

From any line of code, press the F7 key on your keyboard to go to the first program line. Then press the F8 key to execute the current line of code at the predefined speeds. The cursor will automatically move to the next line of code. The process typically ends with using the F4 key to cut the wire.

10.2 BREAK POINTS

RUN TO [F5]

Select the line of code which will serve as the break point in the program. To insert a break point at the current line of code, press the "m" key on the keyboard. Since a lower case "m" is required, the user needs to make sure the Caps Lock is not on in order for the break point to register. Entering a capitalized "M" will not designate a break point. If the line of code is successfully flagged as a BREAK POINT, the letters BRK will be displayed in RED above the line number. At this time, press the F9 key will instruct the program to perform all lines of code in the program prior to the BREAK POINT. To execute the remaining lines of code, use the F8 key.

10.3 SPEED REGULATION

```
RUNNING SPEED    [PAD-/+] OR [O/P]:        0%
```

By using the + and - keys on the keypad or the O and P keys on the keyboard, the user can increase or decrease the speed of the machine. Using various speeds on the program can determine the thresholds for different movements and optimize production speeds.

10.4 ROTARY TESTING

Pressing the "R" key on the keyboard will enable the movement of the axes with ROTARY TESTING by using the RPG CONTROL. Pressing the "R" key will load the following window:

The left column indicates the current position of each axis. Rotating the RPG CONTROL will progressively move the active axis to the values indicated in the current highlighted line of code. The active axis will be highlighted in yellow while all other inactive axes will be in grey. The numeric keys 1 thru 9 can be used for incremental movements in place of

the RPG CONTROL. The speed of each numeric key varies with 1 being the slowest and 9 being the fastest. To utilize the numeric keys, the user presses and holds down the numeric key of choice to make incremental movements.

To complete a program line in its entirety, press the "T" key. This is typically used when a program line requires a wide range of movements. The "<" and ">" keys can also be used to change the RPG sensitivity. If the user wants to start from the beginning of the program, the "Y" key can be used at any time to more to the first line of code.