## TOOL & PART SETUP ON A LATHE

#### **INSTRUCTIONS:**

### **CREATE A MASTER TOOL:**

- 1. PRESS THE INPUT KEY
- 2. SELECT THE TOOL GEOMETRY OFFSETS KEY
- 3. HIGHLIGHT THE DESIRED (Z) OFFSET FIELD AND ENTER ZERO

\*NOTE: NEVER CHANGE THE (Z) FOR THE MASTER TOOL

# AFTER YOU CREATE THE MASTER TOOL MOVE ONTO PART SETUP AND SET A WORK OFFSET

#### **PART SETUP:**

- 1. PLACE YOUR HANDWHEEL IN MANUAL MODE, AND JOG THE TOOL TIP DOWN TO MAKE CONTACT WITH THE FACE OF THE PART
  - 2. SELECT THE PART SETUP SOFTKEY
- 3. SELECT THE DESIRED WORK OFFSET FIELD AND PRESS THE STORE MACHINE POSITION SOFTKEY

4. THE CONTROL WILL HAVE YOU SELECT THE OFFSET YOU WOULD LIKE TO USE, THIS IS TYPICALLY THE SAME AS THE TOOL NUMBER

ONCE YOU HAVE FINISHED THOSE STEPS YOU NEED TO TOUCH OFF YOUR TOOLS, TO DO THIS YOU NEED TO START WITH THE MASTER TOOL YOU CREATED.

#### **MASTER TOOL:**

- 1. PUT YOUR HANDWHEEL IN MANUAL MODE, AND JOG THE TOOL TIP DOWN UNTIL IT CONTACTS A KNOWN DIAMETER ON THE PART
- 2. PRESS INPUT, SELECT TOOL GEOMETRY OFFSETS SOFTKEY (V11 LATHES), TOOL SETUP ON PREVIOUS VERSIONS
  - 3. HIGHLIGHT THE (X) AXIS FIELD OF THE CORRECT TOOL
    - 4. PRESS THE STORE MACHINE POSITION SOFTKEY
    - **5. ENTER THE MEASURED DIAMETER IN THE FIELD**
- \*WE NOW HAVE OUR MASTER TOOL TOUCHED OFF, SO WE CAN NOW BEGIN TO TOUCH OFF OUR OTHER TOOLS

#### **Z-AXIS:**

- 6. PLACE YOUR HANDWHEEL IN MANUAL MODE, AND JOG THE TOOL TIP DOWN UNTIL IT IS IN CONTACT WITH THE FACE OF THE PART
  - 7. PRESS THE STORE MACHINE POSITION SOFTKEY
- 8. ENTER THE (Z) OFFSET DISTANCE FROM THE FACE OF THE PART TO (Z)
  ZERO

#### X-AXIS:

- 9. PUT YOUR HANDWHEEL IN MANUAL MODE, AND JOG THE TOOL TIP DOWN UNTIL IT CONTACTS A KNOWN DIAMETER ON THE PART
- 10. PRESS INPUT, SELECT TOOL GEOMETRY OFFSETS SOFTKEY (V11 LATHES), TOOL SETUP ON PREVIOUS VERSIONS
- 11. HIGHLIGHT THE (X) AXIS OF YOUR NEW TOOL, THEN PRESS THE STORE MACHINE POSITION SOFTKEY
  - 12. IN THE POP-UP SCREEN ENTER THE MEASURED DIAMETER