



# NCC 38/NCC60 NUT CRIMPER OPERATORS MANUAL



## **SAFETY PRECAUTIONS**



**READ INSTRUCTIONS AND IDENTIFY ALL COMPONENT PARTS BEFORE USING CRIMPER**

**KEEP HANDS AWAY FROM PINCH POINTS**

**CONSULT HOSE AND FITTING MANUFACTURER'S SPECIFICATIONS FOR CORRECT MACHINE SETTINGS AND CRIMP MEASUREMENTS**

**ALWAYS WEAR EYE PROTECTION**

**For Parts and Service, Contact:  
CustomCrimp®  
Valparaiso, In 46383  
(219) 462-6128**

## SPECIFICATIONS:

MAX HEAD OPENING W/O DIES NCC38 -----120MM (4.72 IN)  
NCC60 -----145MM(5.71 IN)

MASTER DIE INSIDE DIAMETER NCC38 -----84MM  
NCC60 ----- 145 MM

MAXIMUM DIE OPENING NCC38 -----DIE CLOSED DIAMETER + 38MM  
NCC60 ----- DIE CLOSED DIAMETER + 60MM

CRIMPER SIZE ----- -32 IN WIDE X 24 IN DEEP X 49 IN HIGH

WEIGHT -----750 LB

ELECTRICAL REQUIREMENT ----- 220 VOLT 3 PHASE (STANDARD)  
----- 440 VOLT 3 PHASE (OPTIONAL)

MOTOR -----10.0 HP

RESERVIOR CAPACITY -----8.0 US GALLON

OIL TYPE -----ISO 46 HYDRAULIC OIL

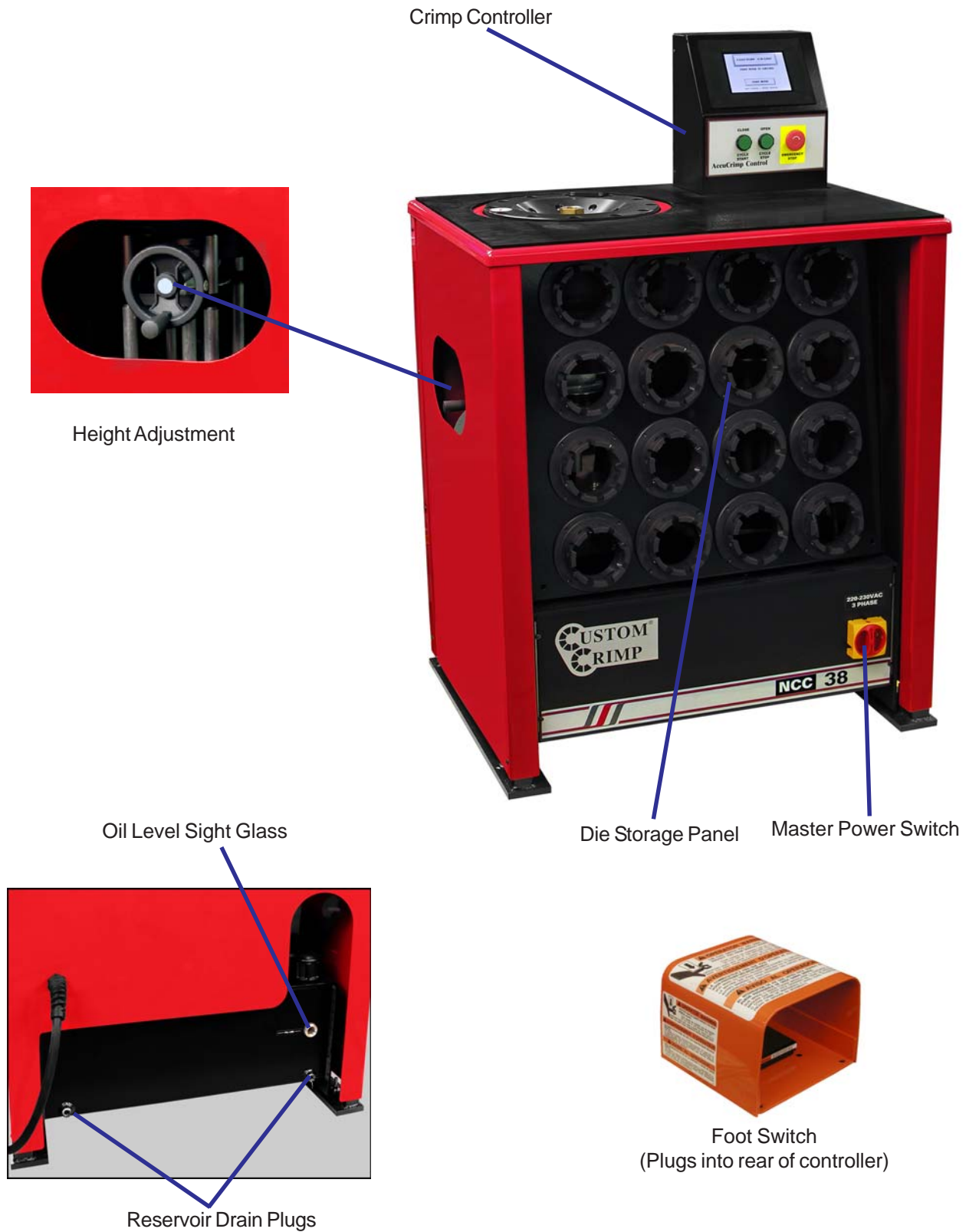
### INITIAL CRIMPER SETUP

CHECK RESERVOIR OIL LEVEL WITH SIGHT GLASS AT THE REAR OF THE TANK

CHECK ELECTRICAL CIRCUIT TO BE CERTAIN THAT IT MATCHES THE CRIMPER  
REQUIREMENTS SHOWN ON THE TAG ATTACHED TO THE CRIMPER CORD

MAKE CERTAIN THAT THE MOTOR ROTATES IN THE DIRECTION OF THE ARROW SHOWN ON  
THE MOTOR HOUSING.

IF MOTOR ROTATION IS INCORRECT, REVERSE ANY TWO HOT WIRES IN THE CRIMPER PLUG





Insert the die fingers into the master die. Note that the dies are sequentially stamped. Insert the dies in the proper sequence.



Note that there are 2 powerful magnets in the base to assure that the fitting adapter does not get removed with the fitting at the completion of the crimping cycle.



Insert the correct fitting adapter into the base of the machine.



Place the fitting over the fitting adapter.



Adjust the fitting up or down until the nut crimping dies are in the correct position relative to the fitting.



To set up the automatic or manual crimp cycle, see the set up instructions for the controller on the following pages.

Patents Pending



MANUAL MODE FUNCTION: CLOSE DIES  
AUTO MODE FUNCTION: CYCLE START

MANUAL MODE FUNCTION: OPEN DIES  
AUTO MODE FUNCTION: CYCLE STOP

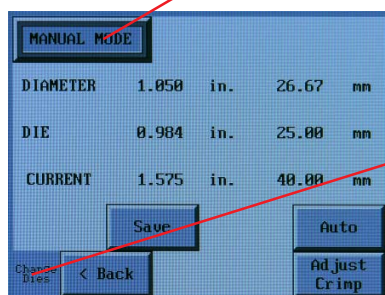
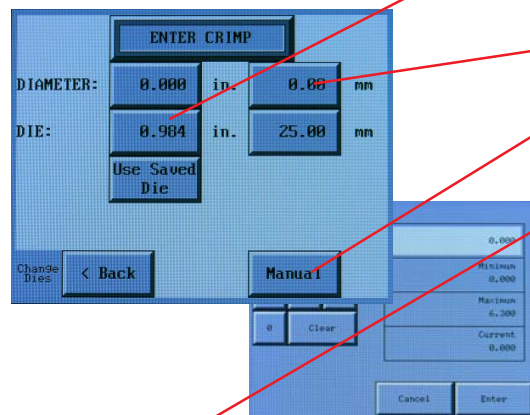
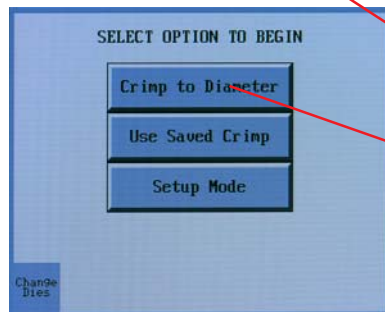
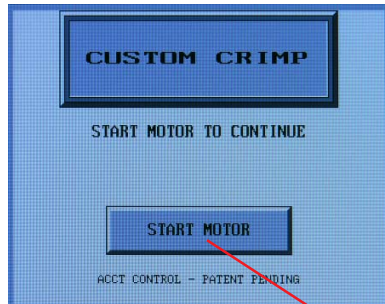
**NOTE:**

IF THE CRIMPER IS IN **MANUAL MODE**, THE GREEN OPEN/CLOSE BUTTONS WILL OPEN AND CLOSE THE CRIMPER HEAD.

IF THE CRIMPER IS IN **AUTO MODE**, THE BUTTONS FUNCTION AS CYCLE START AND CYCLE STOP BUTTONS.

IF THE CRIMPER IS IN **SEMI-AUTO MODE**, PRESSING THE FOOT SWITCH OR THE CLOSE BUTTON WILL CLOSE THE CRIMPER HEAD AND RELEASING WILL HALT THE CLOSING ACTION



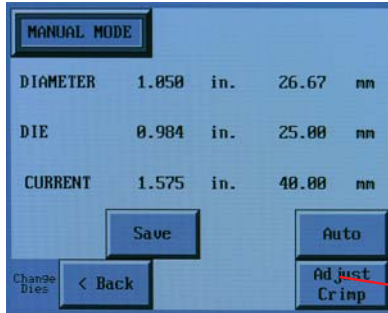


To make a manual crimp, two numbers are needed:  
**The closed diameter of the die** (in either in or mm)  
**The finished crimp diameter** (in either in or mm)  
 That's all you need to know. ACT™ does the rest.

- Press **START MOTOR**
- Select **CRIMP TO DIAMETER**
- Enter the closed diameter of the die set in either in or mm and press **ENTER**. *Note: for a 25mm die, enter 2500. ACT™ will add the decimal point.*
- Enter the finished crimp diameter and press **ENTER**.
- From the **ENTER CRIMP** screen, press the **MANUAL** button to put the crimper in manual mode
- Confirm that the die and finished crimp diameters are correct and that **MANUAL MODE** is displayed.
- Press and hold the green close button until the crimper stops closing.
- Check the final crimp diameter. If a minor correction is required see **HOW TO MAKE MINOR CORRECTIONS**.

*Tip: Pressing the **CHANGE DIES** button allows the crimper head to be fully opened or closed with the green **OPEN-CLOSE** buttons on the controller front panel. When the **CHANGE DIES** button is blinking the dies can be opened and closed manually without altering any of the crimper settings.*

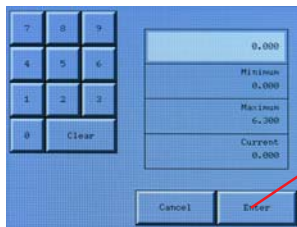
## HOW TO MAKE MINOR CORRECTIONS



- Due to variations in hose and fitting tolerances a minor crimp adjustment may be required if the measured diameter of the final crimp is not within the hose and fitting manufacturer's specifications. ACT™ technology makes minor corrections a simple process which requires no addition or subtraction.

*If the finished crimp diameter is not within the required specifications:*

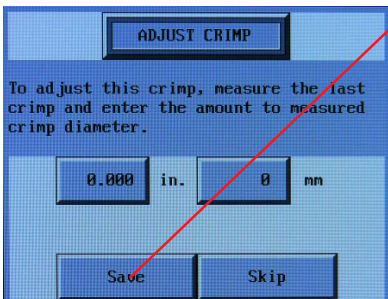
- Press the **ADJUST CRIMP** button.



- Enter the measured diameter of the fitting (Not the amount of correction).

- Press **SAVE**.

- Make another crimp and verify that the fitting is within specifications.



**EXAMPLE:** *If the hose and fitting manufacturer specifies that the finished crimp should measure 1.500 to 1.520 and the measured crimp diameter was 1.530, simply enter the measured diameter (1.530) and press **SAVE**. The finished crimp diameter can be entered in either in or mm and ACT™ will make the conversion.*

*While a single correction will usually bring the hose and fitting into specifications, the process can be repeated as many times as is required.*



## HOW TO ADD A SAVED DIE

Up to 50 different dies can be saved in the computer memory. These dies can be recalled in the set up process eliminating the need to re-enter the die size each time.

To enter a saved die:

- From the **OPTION** screen, press **SETUP MODE**.
- Select **SAVED DIES**
- Select the save position (1-50) where the die is to be saved and press the **EDIT** button
- Enter a die description (up to 12 alpha/numeric characters)
- Enter diameter units (inch or metric)
- Enter the closed diameter of the die.
- Press **SAVE** and **EXIT**
- The saved die will now appear on the **SELECTED DIE** screen. From this screen individual dies can be cleared or edited.

**MACHINE SETUP**

1. Allow crimp to diameter? **Yes**

2. Count is how many crimps? **1**

3. Saved Dies

4. Saved Crimps

**Exit** **More >**

**SELECTED DIE** **< Back** **OK**

1-10	11-20	21-30
31-40	41-50	

**SELECTED DIE** **< Back** **OK**

1 **24 MM Die** **EDIT**

2 **7**

3 **8**

4 **9**

5 **10**

**<==** **EDIT** **0** **CLEAR** **=>**

**Enter Die to Save**

Description **24 MM Die**

Diameter Units **mm**

Closed Diameter **24.00**

**SAVE** **EXIT**

## HOW TO RECALL A SAVED DIE

Select **CRIMP TO DIAMETER**, and from the **ENTER CRIMP** screen, select **USE SAVED DIE**.

Select the saved die (1-50) and press **LOAD** and then **OK**. The die parameters will now be used for the crimp process.

From the **ENTER CRIMP** screen press **MANUAL**.

The saved die will now be shown on the crimp parameters screen

**SELECT OPTION TO BEGIN**

**Crimp to Diameter**

**Use Saved Crimp**

**ENTER CRIMP**

DIAMETER: **0.000** in. **0.00** mm

DIE: **0.000** in. **25.00** mm

**Use Saved Die**

**SELECTED DIE** **< Back** **OK**

1-10	11-20	21-30
31-40	41-50	

**SELECTED DIE** **< Back** **OK**

1 **24 MM DIE** **6**

2 **7**

3 **8**

4 **9**

5 **10**

**<==** **EDIT** **0** **LOAD** **=>**

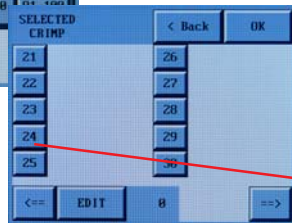
**ENTER CRIMP**

DIAMETER: **1.050** in. **26.67** mm

DIE: **Enter Die Size** **24 MM DIE**

**< Back** **Manual**

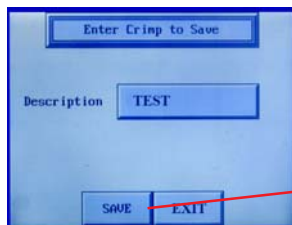
## HOW TO ADD A SAVED CRIMP



- Adjust the die diameter and crimp diameter as required and place the crimper in **MANUAL** mode.

- Press **SAVE**

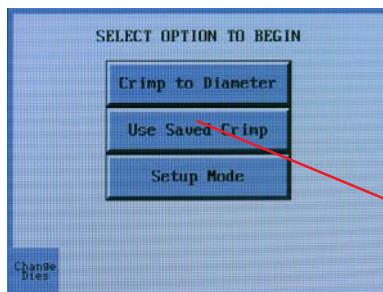
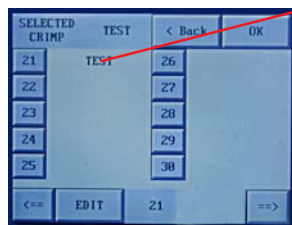
- Select a location (1-100) and press **EDIT**



- Enter a description (up to 12 characters)

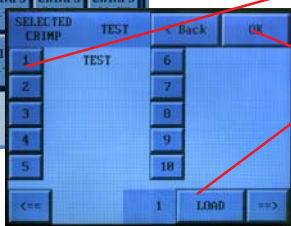
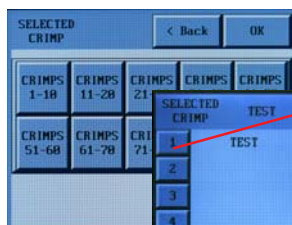
- Press **SAVE** and **EXIT**

- The die and crimp setting can now be recalled from the saved location as required (21 on the example screen shown)



## TO RECALL SAVED CRIMP

- Select **USE SAVED CRIMP** from the option screen

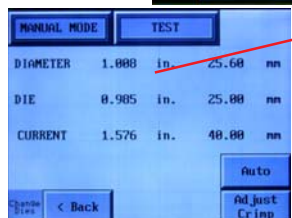


- Select a previously saved crimp from location 1-100.

- Press **LOAD**

- Press **OK**

- The saved crimp will appear on the manual screen



## FULL AUTO MODE

With the crimper in **FULL AUTO** mode additional functions are available:

- The crimper will cycle automatically from the **CRIMP** button on the touch screen, the green **CYCLE START** button on the panel, or the foot switch.
- To set the position to which the dies will retract, close the crimper to the desired retract position prior to pressing the **FULL AUTO** button.

- Pressing the **FULL AUTO** button will toggle the crimper into **SEMI-AUTO** mode. In **SEMI-AUTO** mode, pressing the **FOOT SWITCH** or the **CLOSE** button will close the crimper head and releasing it will cause the head to stop closing. This mode allows the crimper to be jogged into position allowing more precise positioning of a fitting in the dies. Pressing the **SEMI AUTO** button will toggle the crimper back to **FULL AUTO** mode

In **FULL AUTO** mode pressing the foot switch will start the crimp cycle and the dies will stop closing when the crimp cycle is complete

- The **COUNT** function is activated allowing the operator to monitor the number of crimps made.
- A measurement can be required after a preset number of crimps. See **SET REQUIRED MEASUREMENT**

## SET REQUIRED MEASUREMENT

- Press the **PRODUCTION** button.
- Determine if 1 or 2 crimps will count as a crimp
- Toggle the **CRIMP ADJUSTMENT REMINDER** to **ON**.
- Set the **COUNTS BETWEEN CRIMP MEASUREMENTS** to the desired number and press **OK**.

- At the set interval, the **ADJUST CRIMP** screen will come up and the operator will be asked to measure the last crimp and enter a correction if required.

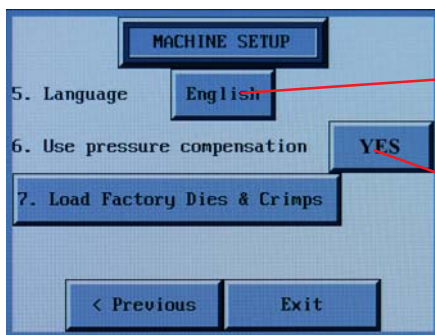


## ACT™ ADDITIONAL FEATURES



- Additional features and functions of the ACT™ controller can be accessed by pressing the **MORE** button on the **MACHINE SET UP** screen.

When “Allow Crimp to Diameter” is set to “**YES**”, all of the adjustment functions of the crimper are available. When “Allow Crimp to Diameter” is set to “**NO**” only the settings entered as a saved crimp can be used.

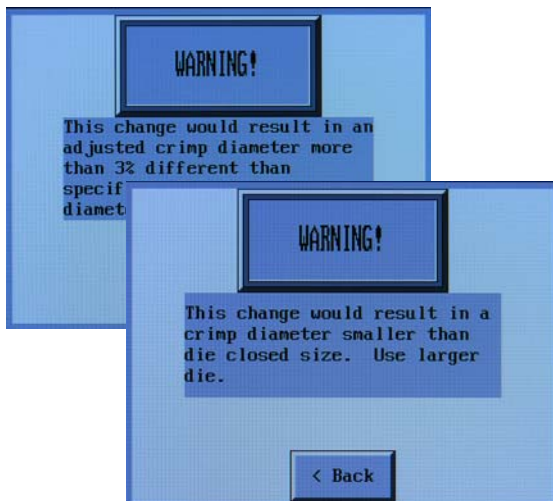


- English or Spanish language options are available.

The “Use Pressure Compensation” is set to “**YES**” for all crimpers equipped with a pressure transducer. A security code is required to turn this function on or off.



- Some hose and fitting manufacturers furnish a complete set of crimp specifications which can be downloaded into the crimper memory. Prior to downloading, a warning screen will appear warning that all previously entered settings will be lost.



- If an operation is attempted which is outside of the range of the die set selected or which could result in a bad crimp, a series of warning screens will appear to help diagnose the problem.

## **PROBLEM: CRIMPER WILL NOT RUN AT ALL**

- Check the E-Stop switch to be certain that it is not depressed. A slight twist is required to release switch after it has been depressed.
- PLC (Programmable Logic Control) must be reset.

## **PROBLEM: CRIMPER RUNS BUT IS SLOW OR NONFUNCTIONAL**

- Check supply voltage to see that it matches the voltage specified on the tag attached to the crimper.
- Check motor rotation and be certain that the motor rotates in the direction of the arrow on the motor housing. For three phase units rotation can be reversed by switching any two wires in the plug.

## **PROBLEM: CRIMPER WILL CLOSE ON FITTING BUT DOES NOT DEVELOP POWER TO COMPLETE THE CRIMP**

- Fitting is too large for selected crimp die. Select a crimp die that is closer to final crimp diameter. Machine has built-in safety bypass to protect internal components from damage due to incorrect die selection.
- Check oil level. Position dies to the fully open position and check oil sight gage in rear of machine. Be sure the oil level is in the middle of the sight glass. Use ISO 32 or 46 weight hydraulic oil.
- If problem(s) persist contact Customer Service for additional troubleshooting assistance.



