OPERATING INSTRUCTIONS
IC-2, 3,4,5,6 INTELLICUT®
SERVO CUTTER Version 5.1xx
Created 11/2009

UNCRATE AND INSPECT

This machine has been carefully crated to assure safe arrival to your plant. It is important that you immediately inspect the equipment upon arrival at your plant and report any possible damage incurred in transit to the trucker.

It is suggested that you uncrate the equipment as soon as possible so that any concealed damage may be discovered.

Compare the packing list with items received and in turn cross check the items with your purchase order and report any discrepancies immediately to RDN MFG. CO. INC. at the address or phone number listed above.

START-UP PREPARATIONS

The Puller/Cutter should be aligned with other extrusion accessory equipment and adjusted to the proper center height.

The encoder for the cut-to-length control is mounted on the belt puller with the encoder drive wheel riding on the puller belt. An alternate mounting position is upstream of the puller with the encoder drive wheel riding on the extrudate. *NOTE:* Encoder must be rotating clockwise when viewing face of wheel.

ELECTRICAL INSTALLATION

All RDN extrusion accessory equipment is generally regarded as portable machinery and therefore, it is not equipped with a fused disconnect switch. If your local electrical code requires fused disconnects, we suggest that you provide one on a wall conveniently located in relation to the equipment. The RDN Cutter is supplied with a twist lock plug and should be plugged into a properly grounded socket.

Make sure that the equipment is properly wired for the voltage phase and cycle supplied at your plant. Should there be any questions regarding the electrical connection, please do not hesitate to contact us.

CUTTER UNIT

This unit utilizes a cutter blade that rotates to cut in response to a signal from the electronic counter in THE ON-DEMAND mode, rotates continuously in the CONTINUOUS mode. An encoder driven by a 12" circumference wheel transmits pulses to the electronic counter. When the number of pulses corresponds to the counter setting the controller activates the servo motor, rotating the cutter blade one revolution. Cutting occurs between two steel bushings with 0.001 inch clearance on each side of the blade. Bushings are secured in an a aluminum bushing holder assembly.

Cutting capacity of the model (see below) is thin wall tubing or cross section that can be inscribed in the same diameter. Normal clearance between the extrudate and ID of the bushing should be 0.020 inch.
IC2 is 2 inch diameter,
IC3 is 3 inch diameter,
IC4 is 4 inch diameter.
IC5 is 5 inch diameter.
IC6 is 6 inch diameter.

A round bushing may be used to cut profiles, but a shaped bushing
may be necessary to prevent distortion.

It is imperative that the cutting edge of the blade is in dead center, or angular cuts may result. The knife may be honed to correct this condition. Blade life may be increased by additional honing.

QUICK BLADE CHANGE
Note: Not available on IC 5 & 6 and Ultra High Torque Cutters

To change a blade, do the following steps:
1. Stop Cutter.
2. Turn off Cutter switch.
3. Open blade guard.
4. Slide cover plate down - away from the blade.
5. Cautiously remove the blade.
6. Set a new blade in holder.
7. Slide cover plate back up. *DO NOT FORCE!* The centrifugal force of the knife arm will hold the slide tight.

NOTE: Use only .025ö thick blade with slide lock RDN Part #A11226.
Use only .042ö thick blade with slide lock RDN Part #A11263

OPERATION

1. Install bushings in bushing holder.
2. Close the blade guard. The guard is equipped with an electrical interlock. The motor is disabled when the guard is open.
3. Connect the electrical plug to the proper voltage outlet.
4. Turn on Cutter switch.
5. Select the desired cut length control mode.

TOUCH SCREEN OPERATION

On power up you will see the **RDN INTELLICUT**™ logo.

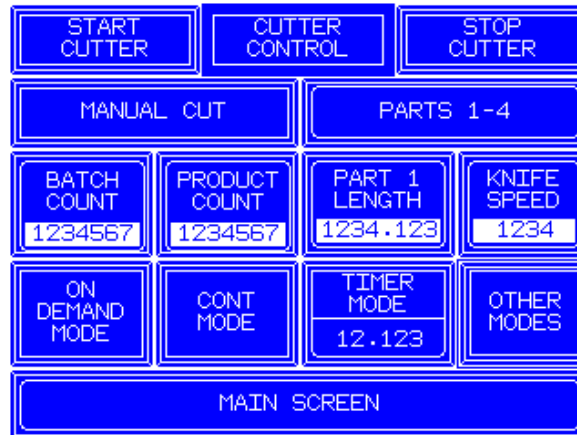When controller is finished booting the main screen will appear.

MAIN SCREEN

From the main screen you can:

- **Cutter Control** - From the Main Screen press the CUTTER CONTROL button. The Cutter Control screen will appear.

CUTTER CONTROL SCREEN

From the Cutter Control Screen you can select:

- **START CUTTER** - This will start the cutter.

- **STOP CUTTER** - This will stop the cutter.

- **MANUAL CUT** - This will rotate the knife arm one revolution at preset knife speed. You may make a manual cut while the cutter is started or stopped. If the cutter is stopped, pressing the MANUAL CUT button for the first time homes the knife arm, then rotates the knife arm one revolution at preset knife speed.

- **PRODUCT / BATCH COUNT -** Shows the Product and Batch counters current value. They will increase in count each time the knife completes a cut cycle. To turn either on/off, reset the counters or set the batch output value press the BATCH COUNT or PRODUCT COUNT button. The reset counters screen will appear.

RESET COUNTERS SCREEN

PRODUCT COUNT , this counts each cut and keeps going up forever, until you reset it.
PREBATCH COUNT, this counts up to the value set in PREBATCH SIZE, then turns on the PREBATCH OUTPUT.
BATCH COUNT, this counts up to the value set in BATCH SIZE, then turns on the BATCH OUTPUT and resets the BATCH COUNT AND PREBATCH COUNT to zero

The Counters can be turned on/off by pressing the toggle buttons.

Example: To turn on product counter press the PRODUCT COUNTER OFF button its state will then change to read PRODUCT COUNT NO, to turn off touch again.

To reset the counters, pick which reset button you need and simply press it. To set the batch size press SET BATCH SIZE button and a number pad will appear. Enter desired value, anywhere from 1 to 99999, press **Enter** to set and DONE to return to last screen.

One batch consists of the number of part lengths with a preset number greater than õ0.ö When the number in batch size is reached, it will reset to õ0ö and turn on the BATCH OUTPUT for preset on time up to 9.99 seconds. To set the Batch output duration see AUXILIARY OUTPUTS.

- **PART 1 LENGTH** - This button is used when only 1 consecutive cut length is required.

  Press **Part 1 Length**, a number pad will appear. Enter desired value, anywhere from 0.10 to 9999.99, press **Enter**. The value is now set. Press **Done** to return to the last screen.
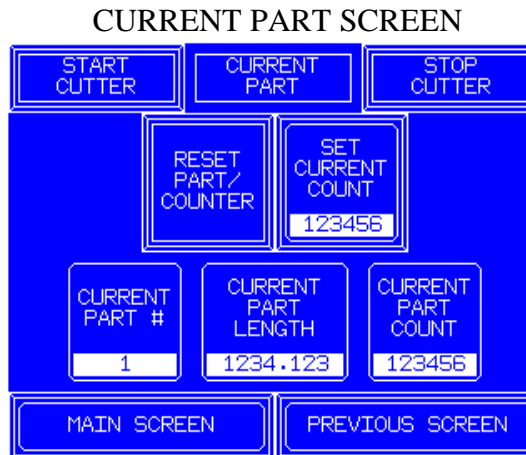
- **PARTS 1 - 4** - From the Cutter Control screen press PARTS 1 - 4. The cut length 1 - 4 screen will appear. Cut lengths are used for the On Demand mode only. Up to eight (optional) different part lengths can be set in series. To select the length of the product to be cut press the corresponding PART number. A number pad will appear. Enter the desired value, anywhere from 0.10 to 9999.99, press ENTER. The value is now set. Press DONE to return to last screen. *NOTE*: If you put a ö0ö in any part length - all part lengths after that will be shut off.

  Use **Part Count** to set the amount of parts per cut length. Press **PART (press the corresponding part count button 1 -8) COUNT**. A number pad will appear. Enter the desired value, press **ENTER**. The value is now set. Press **DONE** to return to last screen.

CUT LENGTH 1-4 SCREEN

START CUTTER	CUT LENGTH 1 THRU 4	STOP CUTTER
PARTS 5-8	CUT LENGTH PERCENT 123.12	CURRENT PART	DISPLAY UNITS
PART 1 COUNT 123456	PART 2 COUNT 123456	PART 3 COUNT 123456	PART 4 COUNT 123456
PART 1 LENGTH 1234.123	PART 2 LENGTH 1234.123	PART 3 LENGTH 1234.123	PART 4 LENGTH 1234.123
MAIN SCREEN		PREVIOUS SCREEN	

- **CUT LENGTH PERCENT -** This function is used to adjust the actual cut length by a percentage factor from 80% to 120%.

- **CURRENT PART** - From the cut length 1-4 screen press, **CURRENT PART** the correct part screen will appear. This screen is used when making multiple cuts.

- **RESET PART/COUNTER** - This button sets the multiple cuts back to part 1 with a count of ÷0ø

- **SET CURRENT COUNT** - this button sets the product counter for the current part to any given #.
  Example: You are on part # 2, set to 12ö with Part 2 Count set to 500pc, you took 20pc for samples and need 20 more, the current count is on 100pc you can set it to 80 to reach the 500 that you need.

- **CURRENT PART #** - Displays the part # that is currently being cut.

- **CURRENT PART LENGTH** - Displays the set length of the part that is currently being cut.

- **CURRENT PART COUNTER** - Displays the count up to preset of the part that is currently being cut.

CURRENT PART SCREEN

```
┌──────────┐ ┌──────────┐ ┌──────────┐
│  START   │ │ CURRENT  │ │   STOP   │
│  CUTTER  │ │   PART   │ │  CUTTER  │
└──────────┘ └──────────┘ └──────────┘
          ┌──────────┐ ┌──────────┐
          │  RESET   │ │   SET    │
          │  PART/   │ │ CURRENT  │
          │ COUNTER  │ │  COUNT   │
          └──────────┘ │  123456  │
                       └──────────┘
    ┌────────┐ ┌────────┐ ┌────────┐
    │CURRENT │ │CURRENT │ │CURRENT │
    │ PART # │ │  PART  │ │  PART  │
    │        │ │ LENGTH │ │ COUNT  │
    │   1    │ │1234.123│ │ 123456 │
    └────────┘ └────────┘ └────────┘
┌──────────────────┐ ┌──────────────────┐
│   MAIN SCREEN    │ │ PREVIOUS SCREEN  │
└──────────────────┘ └──────────────────┘
```
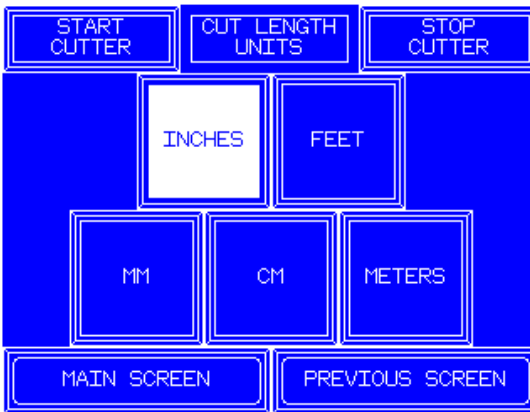
- **PARTS 5 - 8 (Optional)** Press the PARTS 5-8 button and the Parts 5-8 screen will appear.

5-8 PART CUT LENGTH SCREEN

```
┌──────────┐ ┌──────────┐ ┌────────────┐
│  START   │ │CUT LENGTH│ │STOP CUTTER │
│  CUTTER  │ │ 5 THRU 8 │ │            │
└──────────┘ └──────────┘ └────────────┘
┌──────────────────┐ ┌──────────────────┐
│   CUT LENGTHS    │ │  DISPLAY UNITS   │
│    9 THRU 12     │ │                  │
└──────────────────┘ └──────────────────┘
┌────────┐┌────────┐┌────────┐┌────────┐
│ PART 5 ││ PART 6 ││ PART 7 ││ PART 8 │
│ COUNT  ││ COUNT  ││ COUNT  ││ COUNT  │
│ 123456 ││ 123456 ││ 123456 ││ 123456 │
└────────┘└────────┘└────────┘└────────┘
┌────────┐┌────────┐┌────────┐┌────────┐
│ PART 5 ││ PART 6 ││ PART 7 ││ PART 8 │
│ LENGTH ││ LENGTH ││ LENGTH ││ LENGTH │
│1234.123││1234.123││1234.123││1234.123│
└────────┘└────────┘└────────┘└────────┘
┌──────────────────┐ ┌──────────────────┐
│   MAIN SCREEN    │ │ PREVIOUS SCREEN  │
└──────────────────┘ └──────────────────┘
```
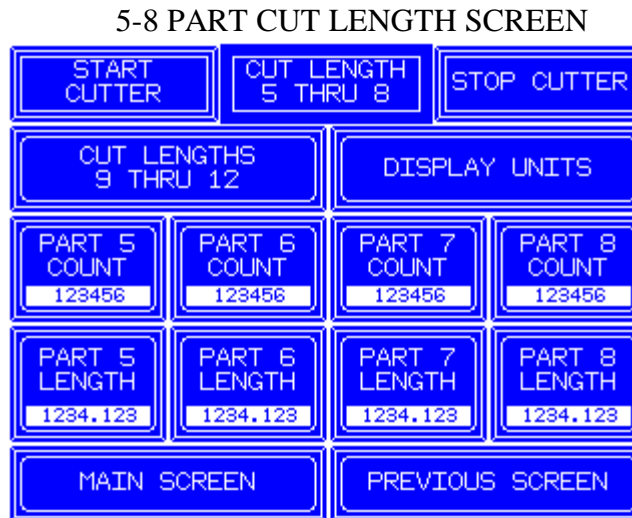
- **DISPLAY UNITS** - Press the DISPLAY UNITS button. The cut length units screen will appear. Cut length units changes the count to inches, feet or (optional) centimeters and millimeters. *NOTE:* When changing units, the controller automatically will convert all part lengths to the newly chosen unity type.

CUT LENGTH UNITS SCREEN

```
┌─────────────────────────────────────────────────┐
│  ┌──────────┐  ┌──────────┐  ┌──────────┐        │
│  │  START   │  │CUT LENGTH│  │   STOP   │        │
│  │  CUTTER  │  │  UNITS   │  │  CUTTER  │        │
│  └──────────┘  └──────────┘  └──────────┘        │
│         ┌──────────┐  ┌──────────┐                │
│         │          │  │          │                │
│         │  INCHES  │  │   FEET   │                │
│         │          │  │          │                │
│         └──────────┘  └──────────┘                │
│   ┌──────────┐ ┌──────────┐ ┌──────────┐          │
│   │          │ │          │ │          │          │
│   │    MM    │ │    CM    │ │  METERS  │          │
│   │          │ │          │ │          │          │
│   └──────────┘ └──────────┘ └──────────┘          │
│  ┌────────────────┐  ┌────────────────┐           │
│  │  MAIN SCREEN   │  │ PREVIOUS SCREEN │          │
│  └────────────────┘  └────────────────┘           │
└─────────────────────────────────────────────────┘
```
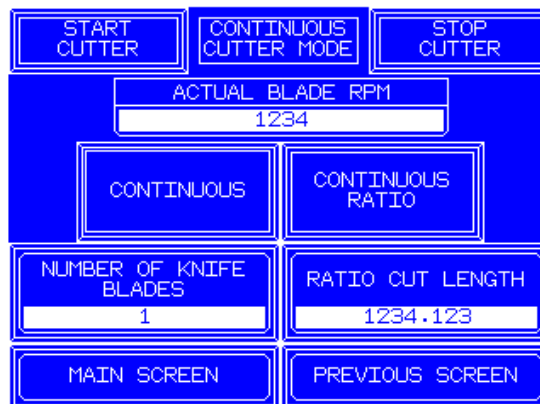
- **KNIFE SPEED** - Sets the velocity that the blade will cut the product in On Demand Mode, Continuous Mode, Timer Mode, and Photo Cut Mode. In Continuous Mode the set point will affect the length of the product per line speed.

- **ON DEMAND MODE** - Pressing ON DEMAND MODE button changes the operating mode to on demand. In this mode the controller is operating off of the encoder that is mounted on a puller or the extrudate. When the encoder wheel rotates, the pulses from the encoder are fed into the controller, one revolution of the wheel equals one foot or twelve inches. The cutter blade rotates one revolution when the set cut length is reached.

NOTE: The encoder must be rotating in the correct direction for this mode to work.

- **CONTINUOUS MODE** - Press the CONT. MODE button. The CONTINUOUS CUTTER MODE screen appears.

CONTINUOUS CUTTER SCREEN

```
┌─────────────────────────────────────────────┐
│ ┌──────────┐ ┌──────────┐ ┌──────────┐       │
│ │  START   │ │CONTINUOUS│ │   STOP   │       │
│ │  CUTTER  │ │CUTTER MODE│ │  CUTTER  │      │
│ └──────────┘ └──────────┘ └──────────┘       │
│   ┌───────────────────────────────┐          │
│   │      ACTUAL BLADE RPM         │          │
│   │          1234                 │          │
│   └───────────────────────────────┘          │
│   ┌──────────┐    ┌──────────┐                │
│   │          │    │CONTINUOUS│                │
│   │CONTINUOUS│    │  RATIO   │                │
│   │          │    │          │                │
│   └──────────┘    └──────────┘                │
│  ┌──────────┐    ┌──────────┐                 │
│  │NUMBER OF │    │RATIO CUT │                 │
│  │  KNIFE   │    │ LENGTH   │                 │
│  │ BLADES   │    │          │                 │
│  │    1     │    │ 1234.123 │                 │
│  └──────────┘    └──────────┘                 │
│ ┌──────────┐    ┌────────────────┐            │
│ │MAIN SCREEN│   │ PREVIOUS SCREEN │           │
│ └──────────┘    └────────────────┘            │
└─────────────────────────────────────────────┘
```

NOTE: This mode was designed to allow cut rates values that exceed On Demand capabilities.

Pressing CONTINUOUS button changes the operating mode to continuous. This rotates the blade continuously at the preset knife speed. The knife speed set point will affect the length of the product. When you increase the speed of the knife you will decrease the length of your part. Conversely, when you decrease the speed of the knife you will increase the length of the part.

Note: a low rpm value may not be suitable for cutting certain products.

Pressing CONTINUOUS RATIO button changes the operating mode to CONTINUOUS RATIO. This mode looks at the encoder input, the RATIO CUT LENGTH and the NUMBER OF KNIFE BLADES then calculates the rpm required to achieve the entered cut length. This value is displayed on the screen as the CALCULATED RATIO RPM. *The encoder must be hooked up and turning to use this mode.*

Note: a low rpm value may not be suitable for cutting certain products.

- **TIMER MODE** - Pressing the TIMER MODE button changes the operating mode to timer. This rotates the knife arm one rotation per the set time interval. Time is set in seconds with a maximum of 99.99 seconds.

- **PHOTO CUT MODE** - Pressing the PHOTO CUT MODE button changes the operating mode to photo cell. Every time an external solid state input is activated to the controller the knife arm rotates one rotation. Refer to cutter schematic.

- **PHOTO CELL OPTION PACKAGE** - A beam sent through a fiber optic cable is broken. This detects the end of the extrudate and causes the knife arm to complete a cut. The fiber optic source and receiver are mounted on a bracket which is positioned to adjust the cut length. To position the fiber optics; loosen the bracket mounting screws, turn the handwheel to position the bracket for the desired cut length and then tighten the mounting screws. Each time the extrudate blocks the light beam, the solid state output of the photo cell amplifier switches on the controller which in turn activates the knife arm for one revolution.

- **POSITION CUT MODE** ó This mode does not cam the cutter motor (blade) to the puller encoder. It cycles the blade when the cut length is reached. This mode has limited cuts per minute about 200 to 250 CPM. This mode is used when the puller is run at very low speeds. It is also better to use for off-line cutting.

- **HILL CUT MODE (OPTIONAL)** ó If purchased, see additional operating instructions.

- **CUFF MODE (OPTIONAL)** ó If purchased, see additional operating instructions.

- **PULLER INDEX CUT MODE (OPTIONAL)** ó If purchased, see additional operating instructions.

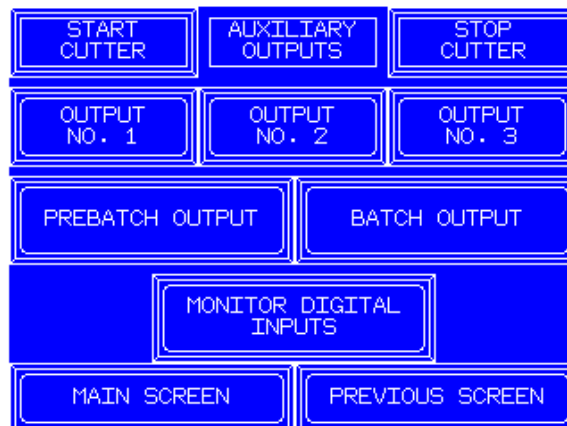- **INPUT INDEX CUT MODE (OPTIONAL)** ó If purchased, see additional operating instructions.

- **Previous Screen** - brings you back to the previous screen.

- **AUXILIARY OUTPUTS & SETUP** - From the Main Screen press AUXILIARY OUTPUTS & SETUP. The Outputs & Setup screen will appear.

```
  START         OUTPUTS        CUTTER
  CUTTER        & SETUP        STOPPED

 AUXILIARY      STRAIGHT        CURVED
  OUTPUTS     BLADE HOME      BLADE HOME

 FLAW DICE      NOT IN          DICE
   MODE        FLAW MODE       LENGTH
                              1234.123

    FLAW      FLAW DELAY    FLAW RESTART
  MODE OFF     DISTANCE       DISTANCE
              1234.123       1234.123

       MAIN SCREEN         BELT GAP AXIS
```

- Straight Blade & Curved Blade Home (OPTIONAL) ó If purchased, see additional operating instructions.
- Flaw Input Mode (OPTIONAL) ó If purchased, see additional operating instructions.
- Belt Gap Axis (OPTIONAL) ó If purchased, see additional operating instructions.

Press the AUXILIARY OUTPUTS button and the auxiliary output screen will appear.

AUXILIARY OUTPUT SCREEN

```
   START        AUXILIARY        STOP
   CUTTER        OUTPUTS        CUTTER

   OUTPUT        OUTPUT         OUTPUT
   NO. 1         NO. 2          NO. 3

  PREBATCH OUTPUT        BATCH OUTPUT

          MONITOR DIGITAL
              INPUTS

     MAIN SCREEN      PREVIOUS SCREEN
```

From the aux. output screen you can select which output, 1, 2, 3, Pre-Batch or batch to configure, or view digital inputs. The selected screen appears.

OUTPUT CONFIGURATION SCREEN

START CUTTER	OUTPUT 1	STOP CUTTER

START DELAY TIME
12.12

ON TIME DURATION
12.12

MAIN SCREEN	PREVIOUS SCREEN

BATCH OUTPUT CONFIGURATION SCREEN

START CUTTER	BATCH OUTPUT	STOP CUTTER

START DELAY TIME
12.12

ON TIME DURATION
12.12

MAIN SCREEN	PREVIOUS SCREEN
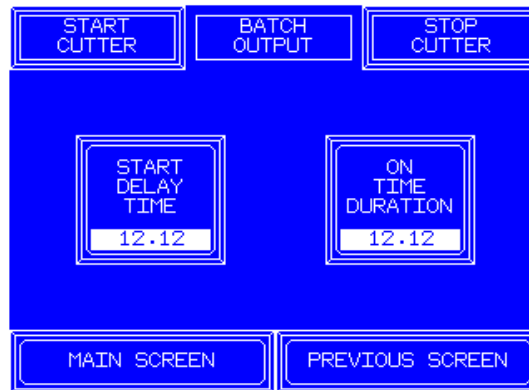
Outputs 1, 2, 3, Pre-Batch and Batch are 24VDC sinking digital outputs with a max. load of 100 MA. For wiring refer to cutter schematic. The outputs turn on every time the knife cycles one cut.

- **START DELAY TIME** - This is the amount of time in seconds, after the cut, that the output will wait till it turns on.

- **ON TIME DURATION** - This is the amount of time, in seconds, that the output will stay on once turned on.

- **MONITOR DIGITAL INPUTS** - From this screen you can view digital inputs. If they are highlighted they are on. If not highlighted they are off.

DIGITAL INPUTS

START CUTTER	INPUTS	STOP CUTTER

E-Stop   Blade Guard   Right Bush   Left Bush

Ext/Cuff   Flaw Stop

Manual Cut   Index Low   Index High

MAIN SCREEN	PREVIOUS SCREEN
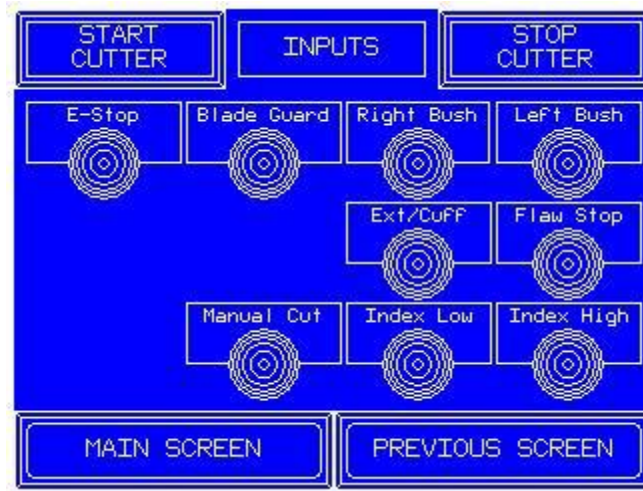
ALARMS - From the Main Screen press ALARMS. The alarm screen will appear. The alarm screen is for viewing alarms sent by the cutter controller. To view, press ALARMS button.

PANEL: ALARM

1-DM0001
2-DM0001 ART CUTTER

ALARM SCREEN

1-DM0001
2-DM0001 TOP CUTTER

ALARM WINDOW

```
 -TRIGGERED ALARM-    12345678901234567
-ACKNOWLEDGED ALARM-  123456789012345B
  -CLEARED ALARM-     12345678901234567
 -TRIGGERED ALARM-    12345678901234567
-ACKNOWLEDGED ALARM-  123456789012345B
  -CLEARED ALARM-     12345678901234567
 -TRIGGERED ALARM-    12345678901234567
-ACKNOWLEDGED ALARM-  123456789012345B
  -CLEARED ALARM-     12345678901234567
 -TRIGGERED ALARM-    12345678901234567
```

1-DM0010
MAIN SCREEN

1-DM0026
PREVIOUS SCREEN

- To delete an alarm, press in the middle of the screen. A menu will appear at the bottom of the screen. Press MODE. Press DELETE. Press DONE. Exit Alarms. *NOTE:* When machine is powered down all ALARMS are lost. There is no memory for past alarms.

	EXIT ALARMS	
ALARM WINDOW		
-13:03-		GUARD OPEN

U	DOWN	ACK	DEL	AKC ALL	DEL ALL	MODE	DONE

- **CLOCK** - From the Main Screen push on the button displaying the time. The CLOCK SCREEN will appear. *NOTE:* Time must be entered in MILITARY TIME fashion, 0900, 1300, 2300, etc. The clock will then display the correct AM or PM in standard time fashion.

CLOCK SCREEN

START CUTTER	CLOCK	STOP CUTTER
12:00:00 AM		
SET SYSTEM HOUR 12	SET SYSTEM MINUTE 12	SET SYSTEM SECOND 12
SET SYSTEM MONTH 12	SET SYSTEM DAY 12	SET SYSTEM YEAR 12
MAIN SCREEN		

NOTE: To adjust the contrast of the screen, simultaneously touch both upper screen corners. A contrast bar will appear on the bottom of the screen. Press the desired setting then press anywhere on the screen to remove the contrast bar.

CUTTER MAINTENANCE INSTRUCTIONS

1. All bearings are sealed and do not require lubrication.
2. Clean the Thompson rods and apply a light coat of oil once each month or sooner if necessary.
3. High Torque Option - Periodically inspect timing belt for tension and wear. Tighten by moving motor or replace as necessary.

PREVENTIVE MAINTENANCE

These machines require little preventive maintenance. However, because they do vibrate, it is advisable to check all fasteners and wire terminals on a quarterly basis.

TROUBLESHOOTING GUIDE

CUTTER PROBLEM	POSSIBLE CAUSES	SOLUTION
Display blank. Cutter panel does not power up.	• Incorrect power supply. • Loose wiring.	• Check for proper voltage and phasing from your source, check serial tag on machine for power information. • Take a voltage reading on the back of the touch screen controller. It should be 24VDC across (+) & (-).
Display locks up or freezes periodically	• Noise on power on ground lines.	• Check for a good earth ground to the cutter, use wire for the grounding and not the electrical conduit pipe. • Check that the cutter is on a clean power line. A power line that has welding equipment or equipment that needs a lot of power requirements is a poor choice. • Make sure that there is no electrical noise producing equipment in the area, RF or Sonic welders.
Display is locked up or frozen.	• Communication lost with controller.	• No reaction when STARTUP screen or any button is pressed. Check communication cable from Touch Screen to controller.
Will not cut in ON DEMAND.	• Incorrect mode. • Encoder not spinning or not hooked up.	• Check that the mode selected is ON DEMAND. • Check alarms for õEncoder running backwardsö õEncoder not runningö õEncoder running to slowö • Inspect encoder cable and connector for a short or open wire(s).

CUTTER PROBLEM	POSSIBLE CAUSES	SOLUTION
Cut length not consistent. ON DEMAND MODE	• Encoder not on flat of belt. • More than 1 part length entered. • Incorrect encoder. Bad spot on encoder.	• Check for a slipping encoder wheel, wheel to moving surface or inspect setscrew from wheel to encoder shaft. • Check control panel program to insure that P1 is the only length entry, make sure that P2, P3 and P4 have zero entered in for the cut length. • Check the Speed Display verse Actual Speed of puller.
Cut length not consistent. PHOTOCELL MODE	• Out of adjustment. • Loose connection.	• Check for dirty or misaligned photo eye cables. • Check photocell unit for a loose or faulty output relay or a bad connection between output relay and control panel.
A Diagnostic screen appears	• Upper left hand corner of Touch- Screen was pressed within 15 seconds after power up	• Press RUN to return to Program Screens

ALARM GUIDE

PROBLEM	POSSIBLE CAUSES	SOLUTION
ALARM - Guard Open	• The blade guard is open.	• Close the blade guard. • Check wiring to guard limit switch.
ALARM - Left bushing removed	• Bushing not installed • Bushing not steel • Proximity switch bad	• Install bushing. • Bushing cannot be aluminum or stainless steel. • Go to diagnostics screen and check input.
ALARM - Right bushing removed	• Bushing not installed • Bushing not steel • Proximity switch bad	• Install bushing. • Bushing cannot be aluminum or stainless steel. • Go to diagnostics screen and check input.
ALARM - Cutter Could Not Home	• Motor Rotates and Home input not received by amp. • Motor Does not rotate (move) Also see Alarm - Cutter Error	• Check gap of proximity switch to pick up bolt on knife arm. Setting should be .020ö. • If gap is OK check that bolt has not been changed from steel to other material. • If equipped: With Prox. and bolt lined up, check for 5VDC on output of prox. • If above check out - replace proximity switch with RDN part #A3065. • Check amp LEDǿs are any on? If so see Diagnostic Indicator chart below. • Is the Amplifier Green Power LED on? If not check L1 & L2 at the amp for power.

PROBLEM	POSSIBLE CAUSES	SOLUTION
ALARM - Cutter Error	• Motor does not rotate when pressing start button	• Note: When Reset LED is on the amp/motor is disabled. When Reset LED is off the amp/motor is enabled. Press Start Button, reset LED should turn off and motor should rotate. Check the small LEDs on the amp. If any go on check the **DIAGNOSTIC INDICATORS ON THE AMPLIFIER** page for explaination.
	• Trying to cut too thick a product. • Knife arm has restriction	• Heat may be needed to help cut the product. If necessary, send a sample product to RDN for a determination if the machine is capable of cutting the desired thickness.
	• Blade dull • Too many cuts per minute • Cooling fan obstructed • Cooling fan inoperative	• Power down machine, Open blade guard to make sure that the bushings are properly spaced so the knife is not sticking between them or stuck in extrudate. OR - With power OFF - spin knife arm by hand and check for obstruction. • Change blade. • Use continuous mode or slow down the puller. • Remove obstruction • Clean Fan • Replace as necessary
ALARM - Cut length too short	• Trying to cut too short a piece	• Adjust the, puller speed to accommodate the cut size desired. • Increase cutter blade speed • Use continuous mode
ALARM - Cutter RPM too fast	Trying to cut too short a part in Continuous Ratio Mode	• Change to 2 blades
ALARM - Cutter RPM too slow	Trying to cut too long a part in Continuous Ratio Mode	• Use On Demand Mode