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## **Coe Wintriss® SFI**

***Servo Feed Interface for SmartPAC®, SmartPAC® 2, ProCam® 1500,  
DiPro® 1500***

**1105700**

**Rev. C August 2015**

***Tech Support Hotline 800-586-8324 8-5 EST***



**Wintriss Controls Group, LLC**

100 Discovery Way  
Unit 110  
Acton MA 01720 USA  
Phone (800) 586-8324  
Fax (978) 263-2048



# Changes for Revision C of the Coe Wintriss SFI User Manual (1105700)

Revision C of the Coe Wintriss SFI User Manual covers all Coe Wintriss SFI versions.

The changes for Revision C include:

- Adding SmartPAC 2 in addition to SmartPAC throughout the manual, including wiring diagrams.

## PROVIDE IMPORTANT INFORMATION

### DURING TROUBLESHOOTING WITH TECH SUPPORT

Whenever you need to contact Wintriss Controls for technical assistance, be ready to provide the following important information to expedite a resolution to the problem.

- **Product name** (e.g. SmartPAC, ProCam 1500, or DiPro 1500)
- **Installed options** (e.g. 8-channel cam.)
- **Firmware version number** (e.g. Vs. 2.00). You can determine firmware version number from the chip on the processor board (see “location of components” in Chapter 2).



**T**hank you for purchasing a Wintriss Product. We appreciate your business and want to do whatever we can to ensure your satisfaction. Wintriss products are built to stay on the job day after day, and are backed by an ironclad guarantee, international standards approvals, and unbeatable support. Whenever you need assistance or service, we back all our products with excellent spare parts inventories, training programs, and prompt repair service. We would like to share with you a list of service options—probably the largest number of service options offered in the industry.

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We offer a toll-free line for technical assistance. Call our Wintriss Technical Support Hotline at 1-800-586-TECH (8324) should you have any questions about your equipment. Our technical staff is ready to assist you Monday through Friday, 8 a.m. to 5 p.m. EST. In many cases our experienced technical staff can resolve your inquiry right over the phone.

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Please call our “800” number for a return authorization (RMA) number to return a product for repair. Returned goods must arrive freight prepaid. In order to process your return quickly, we ask that you provide us with the following pertinent information when you call: purchase order number, shipping address, contact name and telephone number, and product type. The assigned RMA number should appear on all packages returned to Wintriss Controls Group to ensure prompt service.

At the time of requesting an RMA, you will be quoted a flat-rate repair price for the product you are returning. We ask that you either fax us a PO for that amount or enclose the PO with the returned item. This will enable us to ship the item back to you as soon as the repair has been completed. If the item cannot be repaired or there are additional charges, you will be contacted for approval.

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- **Expedited Repair Program**

Rush service providing 48 hour turnaround is available for most products upon request. An Expedite Fee will be applied to our standard repair rate.

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We also offer both product training and maintenance/troubleshooting courses at our Acton, MA and Chicago-area facilities. On-site training is available from the factory or through your local Wintriss representative.

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Returned goods are subject to a 20% restocking charge if returned for credit. The minimum charge is \$50, not to exceed \$250 per item.

Whatever the product, we are committed to satisfying you with innovative engineering, quality construction, reliable performance, and ongoing, helpful support. Call us whenever you need assistance.



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## How to use this manual

Chapter 1 introduces you to the Coe Servo Feed Interface (SFI). It explains what a servo feed interface is, and how it relates to Wintriss products. And it talks about what you can do with your Coe SFI.

Installation is discussed in Chapter 2. The Coe Servo Feed Interface (SFI) installation is basically the same for all Wintriss products mentioned in this manual. There are two sections which provide detail on connecting the Wintriss product to the Coe servo feed. Section 1 deals with SmartPAC. Section 2 covers the 1500 series Wintriss products, specifically ProCam 1500 and DiPro 1500. Any related wiring schematics for SmartPAC and SmartPAC 2 or the 1500 products are provided at the very end of the manual after the index.

The next three chapters of the manual explains how to use SFI in all three SmartPAC operating modes -- Initialization (covered in Chapter 3), Program (Chapter 4), and Run (Chapter 5 - pertains to Coe CPEC and ServoMaster only). Each of these chapters are broken down into two distinct sections: Section 1 SmartPAC and Section 2 1500 series, to provide you specifics on using your Coe SFI. These chapters mention specific parameters that you can initialize and/or modify at your Coe servo feed. They do not, however, explain these parameters in any detail. Refer to your Coe servo feed manual for more information.

Troubleshooting is discussed in Chapter 6. This chapter does not include any Coe error conditions specific to the feed controller. For that information, consult your Coe servo feed user manual.

### NOTICE

#### Coe SFI AND SMARTPAC 2

You can use Coe SFI with SmartPAC 2 as well as with the original SmartPAC. Instructions provided in this manual that are specific to SmartPAC pertain to both SmartPAC 1 and SmartPAC 2 (refer to "SmartPAC 2 and Original SmartPAC," page 4, for more information). Wiring diagrams at the back of the manual show pin connections for both SmartPACs

### NOTICE

#### REFER TO THE APPROPRIATE WINTRISS USER MANUAL

If you need additional help with any of the Wintriss products documented here, consult the appropriate Wintriss user manual, which explains in detail how to use all of the operating modes mentioned above as well as use of the keypad:

SmartPAC: #1100500

SmartPAC with WPC: #1101000

SmartPAC 2: #1126700

SmartPAC 2 with WPC: #1126800

SmartPAC 2 with WPC 2000: #1128600

ProCam 1500: 1095000

## Warranty

Wintriss Controls warrants that Wintriss electronic controls are free from defects in material and workmanship under normal use and service for a period of one year (two years for Shadow light curtains) from date of shipment. All software products (LETS/SFC and SBR), electro-mechanical assemblies, and sensors are warranted to be free from defects in material and workmanship under normal use and service for a period of 90 days from date of shipment. Wintriss's obligations under this warranty are limited to repairing or replacing, at its discretion and at its factory or facility, any products which shall, within the applicable period after shipment, be returned to Wintriss Controls freight prepaid, and which are, after examination, disclosed to the satisfaction of Wintriss to be defective. This warranty shall not apply to any equipment which has been subjected to improper installation, misuse, misapplication, negligence, accident, or unauthorized modification. The provisions of this warranty do not extend the original warranty of any product which has either been repaired or replaced by Wintriss Controls. No other warranty is expressed or implied. Wintriss accepts no liability for damages, including any anticipated or lost profits, incidental damages, consequential damages, costs, time charges, or other losses incurred in connection with the purchase, installation, repair or operation of our products, or any part thereof. Please note:

It is solely the user's responsibility to properly install and maintain Wintriss controls and equipment. Wintriss Controls manufactures its products to meet stringent specifications and cannot assume responsibility for consequences arising from their misuse.

Wintriss Controls Group, LLC  
100 Discovery Way  
Unit 110  
Acton, MA 01720  
Telephone: (800) 586-TECH (8324)  
(978) 268-2700  
Fax: (508) 263-2048  
Internet: <http://www.wintriss.com>

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USER MANUAL  
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# Chapter 1 – Coe Servo Feed Interface (SFI)

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## About Wintriss Servo Feed Interfaces

Servo Feed Interface (SFI) is an option available with Wintriss products: SmartPAC 1, SmartPAC 2, ProCam 1500, and DiPro 1500 with Cam. SFI, which is a combination of hardware and software, is available for most servo-driven feeds. SFI can be integrated with an existing system, or can be ordered with a new one. SFI means that the micro-processor-based Wintriss product is “interfaced” with the feed’s controller, so that the tool’s feed settings are stored in the Wintriss “Tool Number Memory.” The Wintriss control will automatically transmit the settings to the servo feed every time a tool is changed. Typically, there is only one operator interface, or control panel, to use and only one tool number to load when setting a die. With some feeds the Wintriss product becomes the feed’s panel. With other feeds, the feed panel remains but may be rarely, if ever, used.

Although SFI is similar from one feed to the next, there are differences that are feed manufacturer- or feed controller-specific. Remember that SFI is communicating with the feed controller and is not performing the functions of the feed controller. Some feeds will not accept certain information via a communications port or the controller only communicates during certain modes. This may be a controller issue, or a decision on the part of the feed manufacturer. SFI cannot change this, but rather can only “talk/work” within the controller’s communications capabilities or as requested by the feed manufacturer. However, SFI works like the Wintriss product within which it is installed. So, if you are accustomed to the Wintriss product – the SFI programs, adjusts, and loads using similar menus and expected key strokes.

To use the Servo Feed Interface, you must have or install the appropriate firmware chip into the appropriate Wintriss control. Then you simply connect the unit to your servo feed using a cable that plugs into your servo feed's RS-232 port. See Chapter 2 for installation instructions for the appropriate product.

The Coe Servo Feed Interface allows several user-defined choices, as well as feed adjustments while running. It also includes “Feed Advisor.” Feed Advisor determines the optimum (slowest) feed speed for your feed setup. You program the parameters (press speed, feed arc/degrees available to feed, and length) and it calculates the feed speed. If it is impossible, Feed Advisor will offer a suggested solution.

With SFI, the feed is set and its parameters stored at the Wintriss product. There are three modes: Initialization, Program, Run/Adjust. Depending on the product, there may be different titled subheadings in these modes. However, the features are basically similar.

In **Initialization mode**, you set the major parameters – basically configuring how the feed/SFI works. Here is where you also zero the resolver, determine the system’s security, and configure cam “auto advance” parameters, plus more.... Notice that feed parameters vary depending upon if you have CPEC, ServoMaster or BG2 feeder. **See Chapter 3.**

In **Program mode**, you program a tool number, make major changes to a setup, use the Feed Advisor (if applicable), and load the Tool Number that you want to run. Notice that some feed parameters may vary depending upon whether you have CPEC, ServoMaster or BG2 feeder. See **Chapter 4**.

In **Run or Adjust mode**, you can load a Tool Number and fine-tune the loaded Tool Number – if allowed by your security settings (Initialization Mode) for the Coe CPEC or ServoMaster feed controller only. See **Chapter 5**.

## **NOTICE**

### **Coe SFI AND SMARTPAC 2**

You can use Coe SFI with SmartPAC 2 as well as with the original SmartPAC. Instructions provided in this manual that are specific to SmartPAC pertain to both SmartPAC 1 and SmartPAC 2 (refer to “SmartPAC 2 and Original SmartPAC,” page 4, for more information). Wiring diagrams at the back of the manual show pin connections for both SmartPACs.

## **NOTICE**

### **ABOUT COE BG2**

Chapter 5 specifically discusses the Wintriss servo feed interface with the Coe CPEC and ServoMaster feed controllers. The Coe BG2 feed controller does not support any of the Wintriss controls in the Run mode.

The “1500” series products have 8-line displays, while SmartPAC 1 and SmartPAC 2 have a 20-line display. The ProCam 1500, DiPro 1500, and both SmartPACs have similar menus, displays (except size), style, and ease of use.

## **NOTICE**

### **REFER TO THE WINTRISS PRODUCT'S USER MANUAL**

If you need additional assistance in using any of the Wintriss products, please keep the appropriate user manual handy. These manuals explain in detail how to use all of the operating modes mentioned above. They also explain how to use the keypads on each system. The user manuals are as follows:

- SmartPAC: #1107500
- SmartPAC with WPC: #1107600
- SmartPAC 2: #1126700
- SmartPAC 2 with WPC: #1126800
- SmartPAC 2 with WPC 2000: #1128600
- ProCam 1500: #1095000
- DiPro 1500: #1092000

## How SFI works

You do not need to know any of the following information, but here is a little background about how your SFI works. Your Coe Servo Feed Interface (SFI) is actually an RS-232 interface. The RS-232 interface does not just consist of cables and connectors. Like ANSI standards that govern how your press must operate, the RS-232 interface requires specific circuits and software instructions for the transmission of signals and data between your servo feed and your Wintriss control. Transmission of data is handled by software in the Wintriss product and by the software built into your servo feed. Your servo feed came with all the RS-232 circuitry and software already in place.

Wintriss Controls worked in conjunction with your servo feed manufacturer to design the proper hardware and software that will automatically interface with your Coe servo feed. That is why all you have to do is install the firmware chip and connect a cable from the Wintriss control to your servo feed's RS-232 port. Everything else is automatic. You can then make SFI settings at the Wintriss product's keypad just as you would if you used the interface on the servo feed itself.

## What you can do with the Coe SFI

Using the Wintriss control menus, you can:

- Set various feed parameters for your servo feed depending on whether you have Coe CPEC, ServoMaster or BG2.
- Save these settings under the tool number and recall them automatically when you load setups by tool number
- Modify or change setups
- Use Feed Advisor to check your settings. If you key in feed angle and press speed, Feed advisor warns you if your settings are not right for that job.
- Adjust feed length and percent acceleration while the press is running (*pertains to Coe CPEC and ServoMaster only*).
- Lock SFI settings in Adjust Mode to prevent unauthorized tampering

### NOTICE

For more detailed information regarding your Coe servo feed controller, consult the user manual.

## SmartPAC 2 and Original SmartPAC

### NOTICE

In this manual, instructions may refer to *SmartPAC* where the information is the same for both SmartPAC and SmartPAC 2.

The original SmartPAC is sometimes referred to as *SmartPAC 1* to distinguish it from SmartPAC 2.

Your Coe Servo Feed Interface (SFI) can be used with either the original SmartPAC or SmartPAC 2. This manual covers Coe SFI installation and operation for SmartPAC 1, but you can also use the manual to install and operate Coe SFI on SmartPAC 2.

To install Coe SFI on SmartPAC 2, follow the instructions in Chapter 2, referring to the appropriate wiring diagrams at the end of the manual. (Wiring diagrams show connections for both SmartPAC 1 and SmartPAC 2.) For Coe SFI operation with SmartPAC 2, follow the instructions in chapters 3-6.

Coe SFI menu organization in SmartPAC 2 is similar to that in SmartPAC 1, and Coe SFI screens are virtually the same in both SmartPACs. As a result, you can refer to the screens and follow the steps provided in chapters 3-6 of this manual to initialize, program, run, and troubleshoot Coe SFI in both SmartPAC 1 and SmartPAC 2. The main difference between the two SmartPACs is in their panel displays, as shown in Figure 1-1.

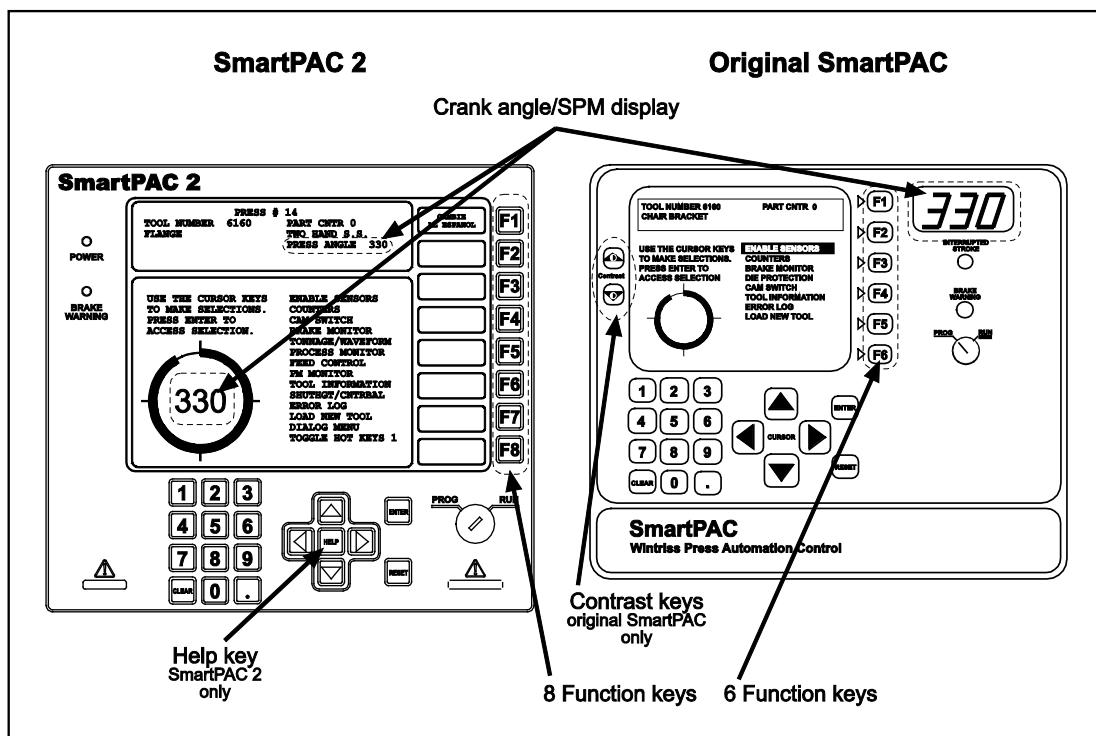


Figure 1-1. Panel Displays, SmartPAC 2 and Original SmartPAC

SmartPAC 1 and SmartPAC 2 panel displays use a different number of function, or “F,” keys. SmartPAC 2 has eight function keys, and the original SmartPAC only six. Be sure to read the instructions on the display and the descriptive labels next to the function keys before you press an “F” key.

**NOTICE**

On many SmartPAC 2 screens, you can press the HELP key (see Figure 1-1) to display instructions showing you how to use the screen.

If you need additional help using Coe SFI with SmartPAC 2, refer to the appropriate SmartPAC 2 user manual:

- SmartPAC 2 (1126700)
- SmartPAC 2 with WPC (1126800)
- SmartPAC 2 with WPC 2000 (1128600)





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# Chapter 2 – Installation for Coe SFI

---

Installing the components that allow your Wintriss control to operate your Coe servo feed is quite simple, and requires these tasks:

- Installation of SFI firmware into Wintriss control
- Wiring connections from the Wintriss control SFI-communications terminal block to the RS-232 port of your Coe servo feed controller. The location of the wiring diagrams (or tables) for each Wintriss product will be noted in the appropriate installation section.
- Setting parameters at the Coe controller

See the following pages for instructions, according to which Wintriss control you have:

- SmartPAC, page 9.
- 1500 series, including ProCam 1500 and DiPro 1500, page 14.

Also refer to your Wintriss product's user manual.

## Terminating Cable Shields

For best performance, cable shields should be terminated to the enclosure near to where they enter. Your Wintriss control has one of two methods for terminating these shields.

- If there are studs on the enclosure near the conduit holes, follow the instructions below.
- If there are no grounding studs on the enclosure, use bonding locknuts to terminate the shields. See page 8.

### Using ground studs for terminating cable shields

For each shielded cable, perform the following steps. Refer to Figure 2-1, below.

1. Strip the cable jacket as far as the end of the conduit fitting.
2. Cut the drain wire to a length that can wrap at least once around the nearest grounding stud. Loosen the nut on the stud, wrap the drain wire around and tighten down.
3. Connect the rest of the wires in the cable to the terminal block as instructed in this chapter.

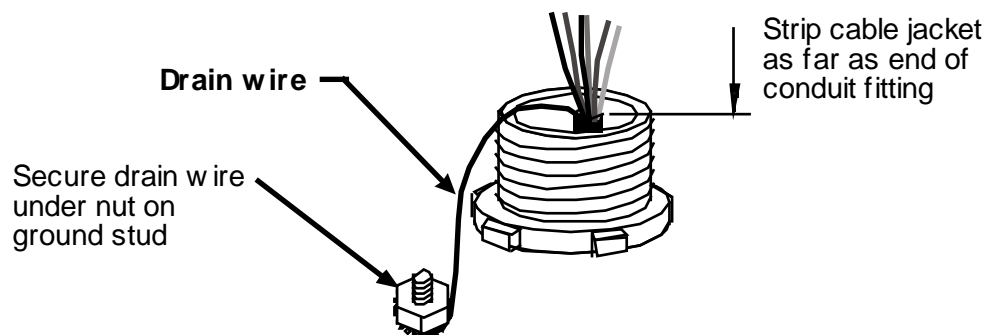


Figure 2-1. Connecting Shield Drain Wire to Ground Stud

## Using bonding locknuts for terminating cable shields

For each shielded cable, perform the following steps. Refer to Figure 2-2. Bonding locknuts are provided with your unit.

1. Install bonding locknut and tighten down forcefully to pierce paint on enclosure.
2. Strip the cable jacket as far as the end of the conduit fitting.
3. Cut the drain wire to a length that can wrap at least once around the grounding screw on the bonding locknut. Loosen the grounding screw, wrap the drain wire around it and tighten down.
4. Connect the rest of the wires in the cable to the terminal block as instructed in this chapter.

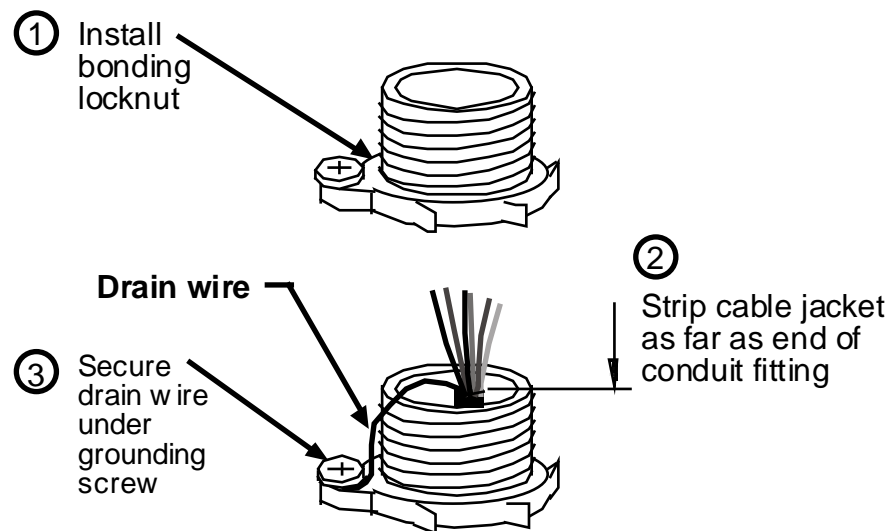


Figure 2-2. Terminating a Cable Shield with a Bonding Locknut

## Section 1: SmartPAC

This section explains how to perform the installation for Coe SFI with SmartPAC. For SmartPAC to be compatible with the Coe servo feed, your kit would consist of the following ordered items:

- SFI firmware (unless factory-installed at time of order)
- 20-foot 2-conductor shielded cable with a DB25 connector attached on one end
- 10-pin connector

### Upgrading SmartPAC firmware

#### **WARNING**

##### **ELECTRIC SHOCK HAZARD**

- Turn off and disconnect power from the Wintriss control, the press, your feeder and any other machinery they are connected to before making any wiring connections. This includes disconnecting power to the machine control and motor.
- Remove all fuses and “tag out” per OSHA 1910.147 Control of Hazardous Energy (Lockout/Tagout).
- Ensure that installation is performed by qualified personnel.

**Failure to comply with these instructions could result in death or serious injury.**

#### **NOTICE**

For instructions on how to install upgraded firmware for Coe SFI in SmartPAC 2, refer to Appendix B, “Updating SmartPAC 2 Firmware,” in the SmartPAC 2 user manual.

You will need to upgrade SmartPAC for SFI™ ServoFeed Interface capability. Follow these steps:

1. Turn power off to SmartPAC. The LCD on the front panel should be blank and the angle/RPM display should be unlit.
2. Before you proceed, you should ground yourself by touching any large metal object. This will remove any static electricity that you may be carrying around. A static electricity “zap” will destroy the components.

#### **CAUTION**

##### **FIRMWARE BOARD INSTALLED IN WRONG LOCATION**

Install the SmartPAC firmware board in the correct location on the main board as shown in Figure 2-3 of this chapter.

**Failure to comply with these instructions could result in property damage.**

3. Look inside SmartPAC and locate the firmware board, which is located toward the bottom left of the main processor board (Figure 2-3). Take note of its orientation.

4. Remove the four screws which hold the board to the standoffs under the board, and put them aside for now.
5. Unplug and remove the board. Be sure not to confuse the old firmware board with the new one you will be installing. If necessary, jot down the version number that is found on the firmware chip's white label.
6. Verify that you are still “grounded,” and then remove the new board from the package.
7. Plug the board in. The connectors on the underside of the board are keyed; so they can only be plugged in one way. These connectors will connect correctly with the mating pins on the main SmartPAC processor board.
8. Once the board is properly seated, screw the four corners down again (reverse of step 4).
9. Turn the power on and verify the normal operation of the unit. If the unit powers up with a garbled display or “rolling” LEDs, turn the power off and check that the board is properly seated. When you are ready to proceed to the next section, shut off the power to the unit.

### **NOTICE**

#### **CHECKSUM ERROR AFTER UPGRADE**

SmartPAC may generate a tool number checksum error the first time you try to reload each setup. SmartPAC creates a checksum for a tool number to check that the data stored in memory for the tool is the same as the data that comes out of memory when you load the tool number. (Checksum errors are explained further in Chapter 7 of the SmartPAC user manual, Wintriss part no. 1107500 or no. 1107600 - with WPC option.) To correct this problem, go back into Program mode and review the currently loaded tool number setup. Check your counters for accuracy; then reload this tool number again. If the unit is still malfunctioning, call Tech Support for assistance.

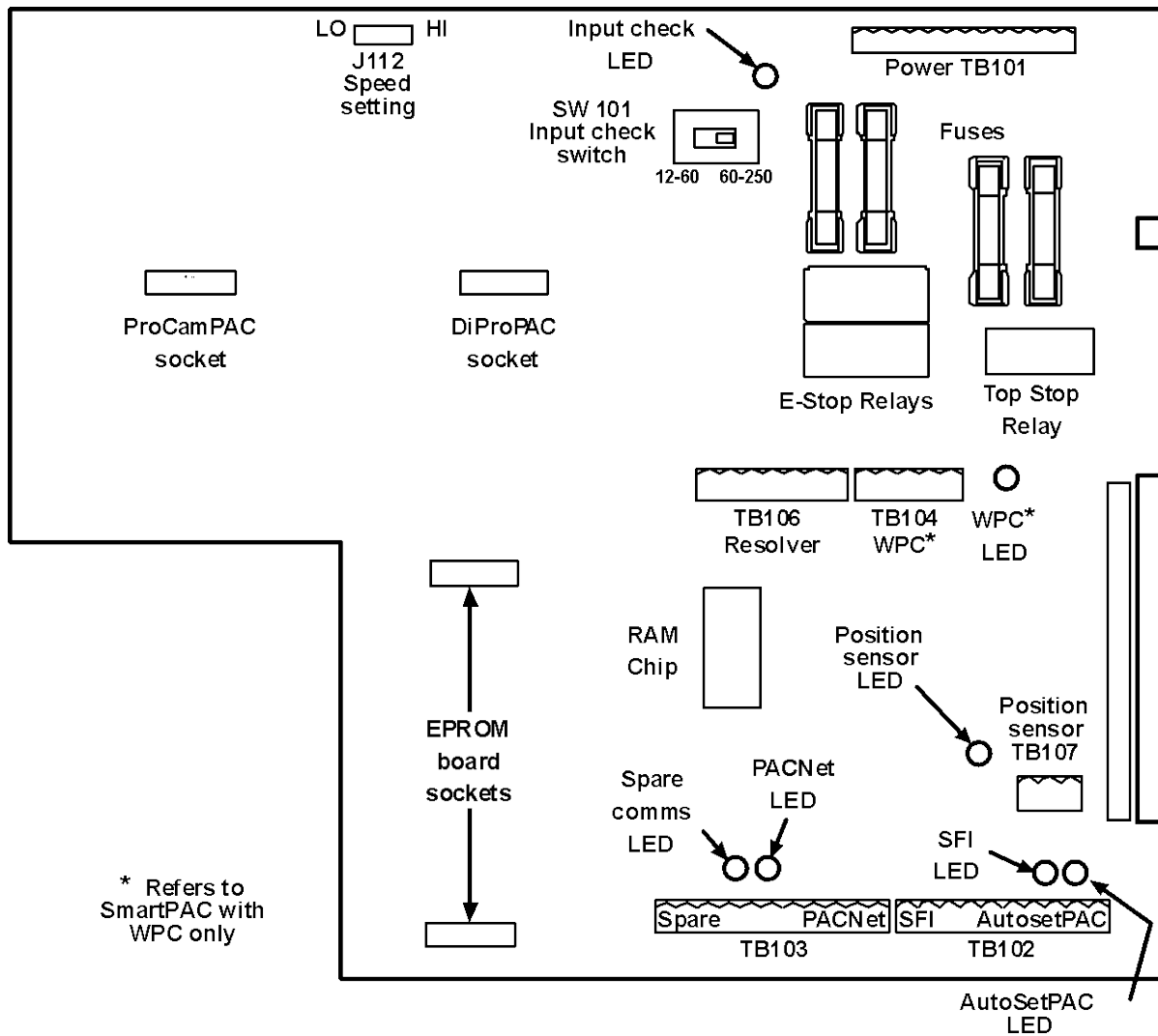


Figure 2-3. Location of components on SmartPAC processor board

## Wiring Connections

### **WARNING**

#### **ELECTRIC SHOCK HAZARD**

- Turn off and disconnect power from the Wintriss control, the press, your feeder and any other machinery they are connected to before making any wiring connections. This includes disconnecting power to the machine control and motor.
- Remove all fuses and “tag out” per OSHA 1910.147 Control of Hazardous Energy (Lockout/Tagout).
- Ensure that installation is performed by qualified personnel.

**Failure to comply with these instructions could result in death or serious injury.**

### **NOTICE**

#### **REFER TO CORRECT WIRING DIAGRAM FOR YOUR FEED MODEL**

Refer to the wiring diagram at the end of the manual that pertains to SmartPAC and your SFI (Figure 1 for BG1; Figure 2 for CPEC; Figure 3 for BG2; Figure 7 for ServoMaster). For additional information, refer to your Coe feed controller manual.

1. *Verify that SmartPAC and your feed are still turned OFF!* You are now ready to connect your servo feed to SmartPAC. Refer to the wiring diagram for your Coe feed controller.
2. Locate the 10-pin connector and the black round cable with a large 25-pin connector on one end. The other end of the cable has three unattached wires (red, black, and shield). Check to make sure that you have the appropriate connector as described at step 5 and in the wiring diagram illustration at the end of this manual.
3. Locate terminal TB102 on the SmartPAC processor board (see Figure 2-3). Next, find the RS-232 port at the bottom of the feed controller.
4. Run the cabling through dedicated, flexible liquid-tight conduit from your feed to SmartPAC. SmartPAC is rated NEMA 12 (protected against dust and oil). You must use conduit of the same rating and make proper connections to ensure NEMA 12 protection.
5. Go to the RS-232 port on your feed first. Plug the DB25 connector which is attached to the cable from SmartPAC into the feed's RS-232 port. It can only go in one way. Tighten the screws on the connector to hold it firmly in its socket. Also tighten all conduit connections. Note that you should have received a DB-25 male connector (Wintriss p/n #4199103).
6. Now go to SmartPAC. The end with the unattached wires goes to SmartPAC. Cut off any extra cable if necessary, and carefully remove the outer insulation and inner shielding on the cable in order to expose the wires. Strip insulation back 1/4” on each wire.

7. You will be connecting the two wires to the 10-pin connector which you will attach to terminal TB102 on the SmartPAC processor board or TB103 on the SmartPAC 2 board. Wire the connections based on the applicable wiring schematic at the end of this manual. Terminate the shield to the enclosure as described on page 7 or 8.
8. To connect a wire (see below), loosen the screws to your feed's terminal (as referenced in the wiring diagram at the end of the manual). Insert the bare part of the wire 90% of the way into the open slot. Retighten the screw, holding the wire firmly in place.

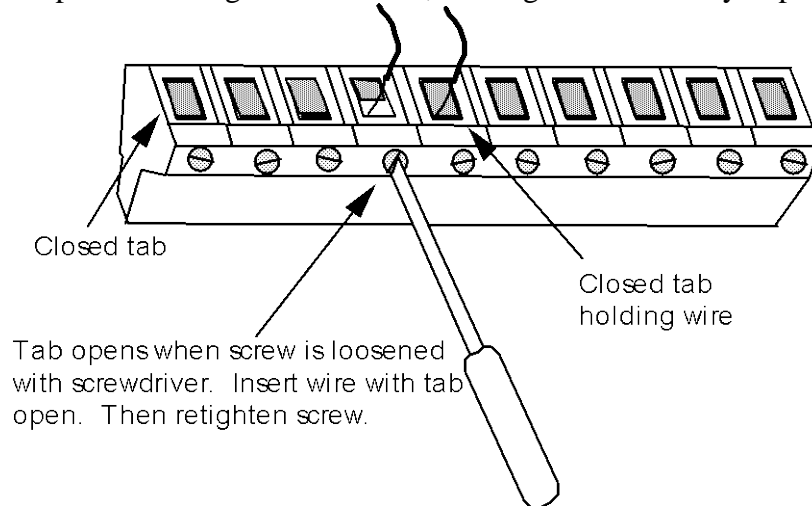


Figure 2-4. Attaching a wire to a connector

## NOTICE

### ENSURE GOOD WIRING CONNECTIONS

Be sure the tab is tightened onto the bare part of the wire, not onto the insulation. If it is on the insulation, you will have a bad connection.

9. Add the jumper between terminals 235 and 240 on SmartPAC TB102.
10. Plug the 10-pin connector into TB102 on SmartPAC, or SmartPAC 2 TB103.
11. You are finished wiring the Coe SFI to SmartPAC. Close the SmartPAC and re-tighten the hardware. Turn power back ON to both SmartPAC and to your feed.
12. Check that SmartPAC is operating normally. If it is working properly, you are now ready to use SFI. Go to the next chapters to learn how to set up and operate your feed through SmartPAC. If the unit powers up with a garbled display or “rolling” LEDs, turn the power OFF and recheck how you installed your firmware. Review “Installing SFI firmware” earlier in this chapter. If the unit is still malfunctioning and you cannot find the reason for the problem, call Wintriss Tech Support.

## Section 2: 1500 Series

This section explains how to perform the installation for SFI with the 1500 series Wintriss products. These include ProCam 1500 and DiPro 1500. Before starting, make sure that you have all these components in your kit:

- SFI firmware chip (EPROM) (unless factory-installed at time of order)
- 20-foot 2-conductor shielded cable with a large DB25 connector attached on one end (Wintriss part no. 4199104)
- 10-pin phoenix connector

Follow these steps to install the components:

### Installing SFI firmware

#### **WARNING**

##### **ELECTRIC SHOCK HAZARD**

- Turn off and disconnect power from the Wintriss control, the press, your feeder and any other machinery they are connected to before making any wiring connections. This includes disconnecting power to the machine control and motor.
- Remove all fuses and “tag out” per OSHA 1910.147 Control of Hazardous Energy (Lockout/Tagout).
- Ensure that installation is performed by qualified personnel.

**Failure to comply with these instructions could result in death or serious injury.**

To upgrade the 1500 unit to communicate with your servo feed, follow these instructions:

1. With power to the 1500 unit turned off, notice that the LCD display on the front panel is blank and the angle/RPM display unlit.
2. Carefully remove the front panel assembly from your enclosure by loosening the hardware and temporarily propping the unit on a flat surface.
3. Locate the firmware chip for that product, located at U104 on either the ProCam 1500 or DiPro 1500 processor boards (refer to Figure 2-5 or Figure 2-6 respectively). Notice that this firmware chip has a label on it.

#### **CAUTION**

##### **CHIP INSTALLED INCORRECTLY**

- Be sure to note the exact orientation of the firmware chip. Notice in particular the semi-circular notch on the bottom of the chip. When you replace the chip, the notch on the new chip *MUST* also be face down. *If you plug the chip in backwards, it will be destroyed!*

**Failure to comply with these instructions could result in property damage.**



4. Insert a small screwdriver between the bottom of the chip and the socket and carefully pry the chip out of its socket. Be careful not to get the screwdriver under the socket itself. Put the chip aside.
5. Open the package containing your new SFI firmware chip. Before you remove the chip from the package, you should ground yourself by touching any large metal object (such as the press). This will remove any static electricity that you may be carrying around. A static electricity “zap” will destroy the chip.

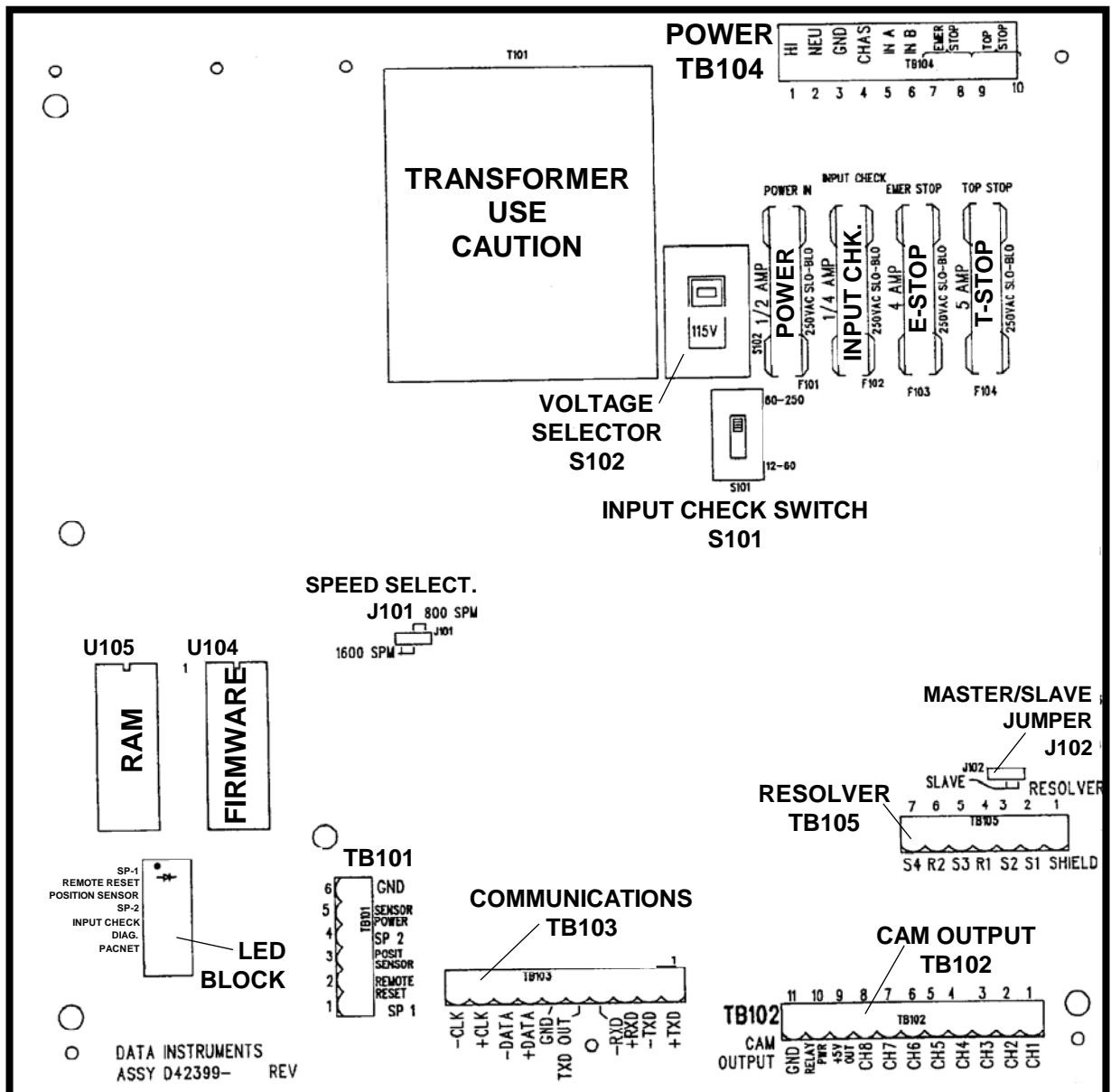


Figure 2-5. Location of components on ProCam 1500 processor board

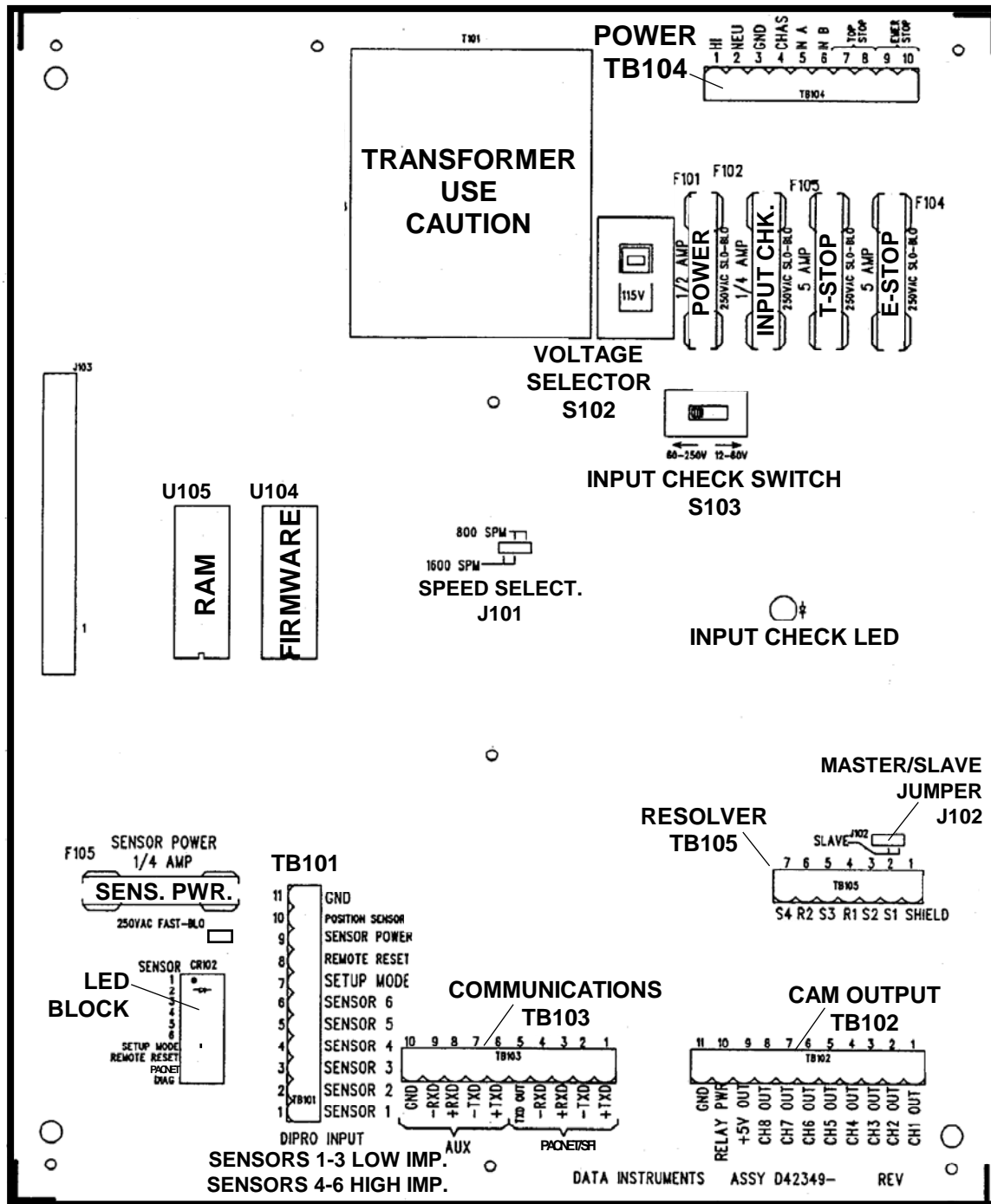


Figure 2-6. Location of components on DiPro 1500 processor board

6. Once you are “grounded,” remove the chip from its holder. *REMEMBER to orient the chip so that the notch faces downward.*
7. Plug the chip into its socket by first plugging in the left row of pins and then aligning the right row of pins over the socket and pushing straight in.
8. If the two rows of pins are spread too far apart to plug easily into the socket:
  - a. Hold the chip on its side on a desk or a flat surface with the pins pointing toward you.
  - b. Being careful NOT to overbend the pins, gently flex the top of the chip towards you. Turn the chip over so that the other row of pins is now on the desk pointing towards you. Flex it again, thus bending the other row of pins towards each other. Pins should be parallel.
  - c. Try plugging the chip into the socket again, as in step 7. If necessary, repeat Steps 8A and 8B.
9. Make sure that the notch in the chip is at the bottom and that all of the pins are in the socket.
10. Turn the power ON to the 1500 unit without re-connecting the panel to your enclosure. Verify the normal operation of the unit.

If the unit powers up with a garbled display or “rolling” LEDs, turn the power OFF and repeat step 9. Sometimes one or more pins are bent and not plugged in properly. If the unit is still malfunctioning, call Wintriss Tech Support. *Turn the 1500 unit and your feed controller OFF before proceeding to the next step.*

## Wiring Connections

### WARNING

#### ELECTRIC SHOCK HAZARD

- Turn off and disconnect power from the Wintriss control, the press, your feeder and any other machinery they are connected to before making any wiring connections. This includes disconnecting power to the machine control and motor.
- Remove all fuses and “tag out” per OSHA 1910.147 Control of Hazardous Energy (Lockout/Tagout).
- Ensure that installation is performed by qualified personnel.

**Failure to comply with these instructions could result in death or serious injury.**

### NOTICE

#### REFER TO CORRECT WIRING DIAGRAM FOR YOUR FEED MODEL

Refer to the wiring diagram at the end of the manual that pertains to 1500 units and your SFI (Figure 4 for BG1; Figure 5 for CPEC; Figure 6 for BG2; Figure 8 for ServoMaster). For additional information, refer to your Coe feed controller manual.

1. *Verify that the 1500 unit and your feed are still turned OFF!* You are now ready to connect the unit to your servo feed controller. Locate the 10-pin connector and the black round cable with a large 25-pin connector on one end. The other end of the cable has three unattached wires (red, black, and shield). Check to make sure that you have the appropriate connector for your feed as described at step 5 and in the wiring diagram illustration at the end of this manual.
2. Locate terminal TB103 on the 1500 unit's processor board (see Figure 2-5 for ProCam 1500 or Figure 2-6 for DiPro 1500). Also find the RS-232 port on your feed.
3. Refer to step 3a for ProCam 1500 or 3b for DiPro 1500 below.
  - a. For ProCam 1500: If ProCam 1500 and your servo feed controller have been installed inside two separate enclosures, run the cable through flexible liquid-tight conduit from your feed to ProCam 1500. ProCam 1500 is rated NEMA 12 (protected against dust and oil). You must use conduit of the same rating and make proper connections to ensure NEMA 12 protection.
  - b. For DiPro 1500: Run the cable through flexible liquid-tight conduit from your feed to DiPro 1500. DiPro 1500 is rated NEMA 12 (protected against dust and oil). You must use conduit of the same rating and make proper connections to ensure NEMA 12 protection.
4. Go to the RS-232 port on your feed.

5. Plug the DB25 connector which is attached to the cable from the 1500 unit into the feed's RS-232 port. It can only go in one way. Tighten the screws on the connector to hold it firmly in its socket. Also tighten all conduit connections. Note that you should have received a DB-25 male connector (Wintriss p/n #4199103).
6. Now go to the 1500 unit. The end with the unattached wires goes to it. Cut off any extra cable if necessary, and carefully remove the outer insulation and inner shielding on the cable in order to expose the wires. Strip insulation back 1/4" on each wire.
7. You will be connecting the two wires to the 10-pin phoenix connector which you will attach to terminal TB103 on the 1500 unit's processor board. Wire the connections based on the applicable wiring schematic at the end of this manual. Terminate the shield to the enclosure as described on page 7 or 8.
8. To connect a wire, loosen the screws that correspond to the appropriate terminal, so that the corresponding slot to the right will open. See Figure 2-4 earlier in this chapter. Insert the bare part of the wire 90% of the way into the open slot. Retighten the screw, holding the wire firmly in place.

## **NOTICE**

### **ENSURE GOOD WIRING CONNECTIONS**

Be sure the tab is tightened onto the bare part of the wire, not onto the insulation. If it is on the insulation, you will have a bad connection.

9. Repeat step 8 when connecting the other two wires. Make sure you add the jumper between terminals 3 and 6 on TB103 at ProCam 1500, or between terminals 3 and 10 at DiPro 1500.
10. Look at TB103. There may be a plastic plug over pin 5 on this terminal block. If so, remove the pin using needle-nose pliers. Plug the 10-pin connector into TB103.
11. You are finished installing the 1500 SFI. For ProCam 1500, re-connect the panel to your enclosure and re-tighten the hardware. For DiPro 1500, close the DiPro 1500 and re-tighten the hardware. Turn power back ON to both the 1500 unit and to your feed controller.
12. Check that the 1500 unit is operating normally. If it is working properly, you are now ready to use SFI. Go to the following chapters to learn how to initialize, program, and operate your feed using the Wintriss 1500 products. If the unit powers up with a garbled display or "rolling" LEDs, turn the power OFF and recheck how you installed your firmware. Review "Installing SFI firmware" earlier in this chapter. If the unit is still malfunctioning and you cannot find the reason for the problem, call Wintriss Tech Support for assistance.



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# Chapter 3 – Initialization Mode for Coe SFI

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In this chapter you will learn how to use the Coe SFI menus. Specifically you will set several feed initialization parameters. This chapter is divided into these sections:

- *Section 1: SmartPAC*
- *Section 2: 1500 Series products (including ProCam 1500 and DiPro 1500)*

Each section provides you with detail on initializing parameters for the Coe servo feed with the applicable Wintriss control. The first part of each section describes the Coe CPEC and ServoMaster interfaces. The second part describes any differences (if applicable) in using the Coe BG2 interface with the Wintriss product.

If you need more assistance in using the Wintriss product, have the actual user manual handy.

## **NOTICE**

### **REFER TO COE SERVO FEED MANUAL**

This manual mentions certain parameters that you can modify at your Coe servo feed. It does not, however, explain these parameters in great detail. Refer to your Coe servo feed manual for more information.

## **Section 1: SmartPAC**

To get into Initialization mode, turn the Program/Run key to “program” and then press both the “1” and “CLEAR” keys at the same time for one second. (See “Using the keyboard” in Chapter 3 of the SmartPAC user manual)

### **Initialization menu**

## **NOTICE**

### **RETURN TO FIRST DISPLAY IN MODE BEFORE CHANGING MODES**

Before changing modes (for instance -- from Initialization to Program), make sure your screen shows the first display in the mode you are in. If that display is not shown, nothing will happen when you turn the Program /Run key. In that case, keep pressing the RESET key. When the first display in the mode is reached, you will instantly switch to the new mode.

## **SELECT = HIGHLIGHT + ENTER**

To SELECT an item, use the Wintriss control cursor keys to highlight the item and then press the Wintriss control’s ENTER key. (See your Wintriss product user manual.)

Here is the first display in Initialization mode. From this display, select “Feed control.” (see below).

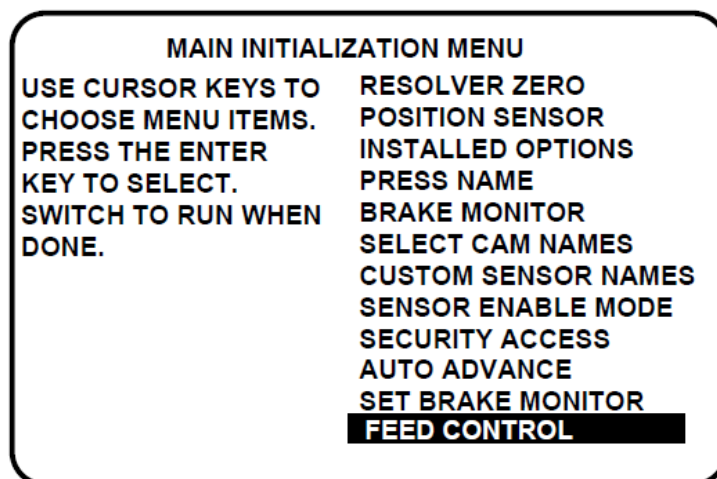


Figure 3-1. Selecting “Feed control” from SmartPAC's Initialization menu (the exact order on your display may vary depending upon installed options)

## Feed control for Coe CPEC and ServoMaster

### NOTICE

#### REFER TO COE SERVO FEED MANUAL BEFORE INITIALIZING SETTINGS

Consult your Coe servo feed manual (or your Coe representative) to properly initialize these settings. Remember, SmartPAC does not change the way the servo feed operates or any parameters or limitations built into your servo feed. Be sure you have read the manual and understand how your servo feed works before making any setting changes.

Once you have selected “Feed control,” here is the display you will see. You use this menu choice to initialize the Coe CPEC and ServoMaster parameters. Select “Change group 1” to see the next menu.

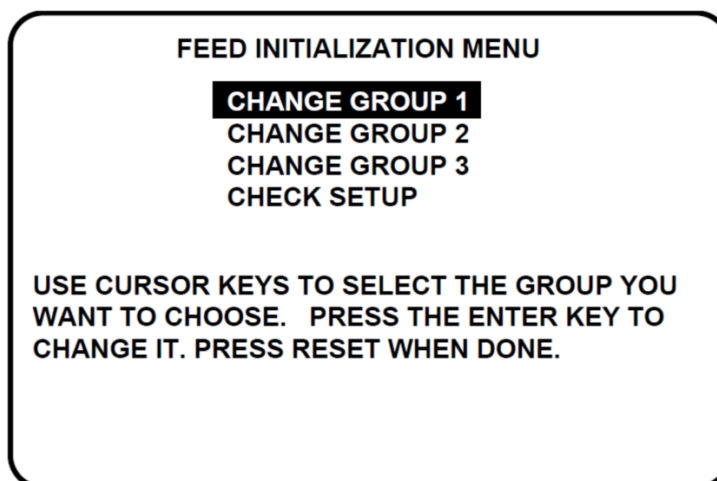


Figure 3-2. CPEC and ServoMaster Feed control menu



Notice in the following illustration that actual values appear on the screen. These values are coming directly from your Coe servo feed controller. Select the item you want to change.

In our example, we have chosen the first item, “F constant #1.”

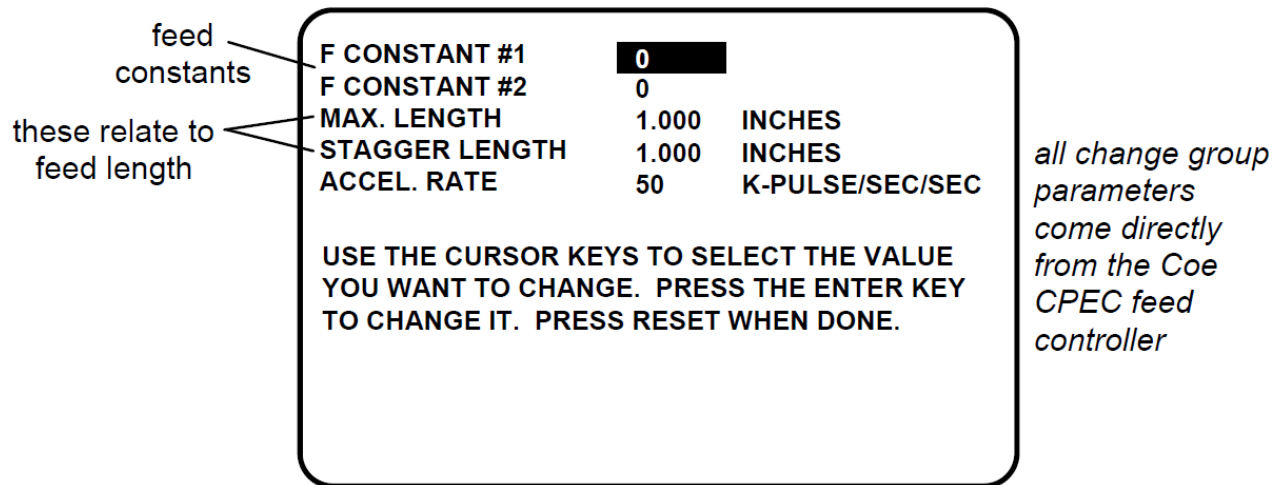


Figure 3-3. Change group 1 display for CPEC and ServoMaster

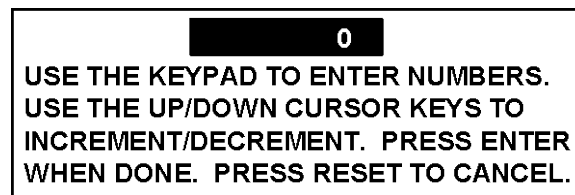


Figure 3-4. Setting “Feed Constant #1” using the superimposed number display

You use the number keys to input numeric values for SFI parameters. You will see a display similar to the illustration above, which guides you on how to use the number keys, as well as the cursor keys. When you are done entering a number using the number keypad, press Enter. SmartPAC will accept the number and move on to the next display. SmartPAC accepts numbers up to seven digits in length. Go to Chapter 3 of the SmartPAC user manual if you are not sure how to use the number display.

All the change group parameters are derived directly from your Coe CPEC or ServoMaster feed controller. Notice in the illustration showing the “Change group 1” screen that “Max. length” and “Stagger length” both refer to feed length.

To properly understand how to set all of these parameters, refer to the Coe user manual for assistance.

When you are done with all the parameters on the “Change Group 1” display, press the Reset key to return to the Feed Control menu.

If you want to change groups 2 or 3, select that item on the Feed Control menu and then follow the previous steps. This is how each of these displays look.

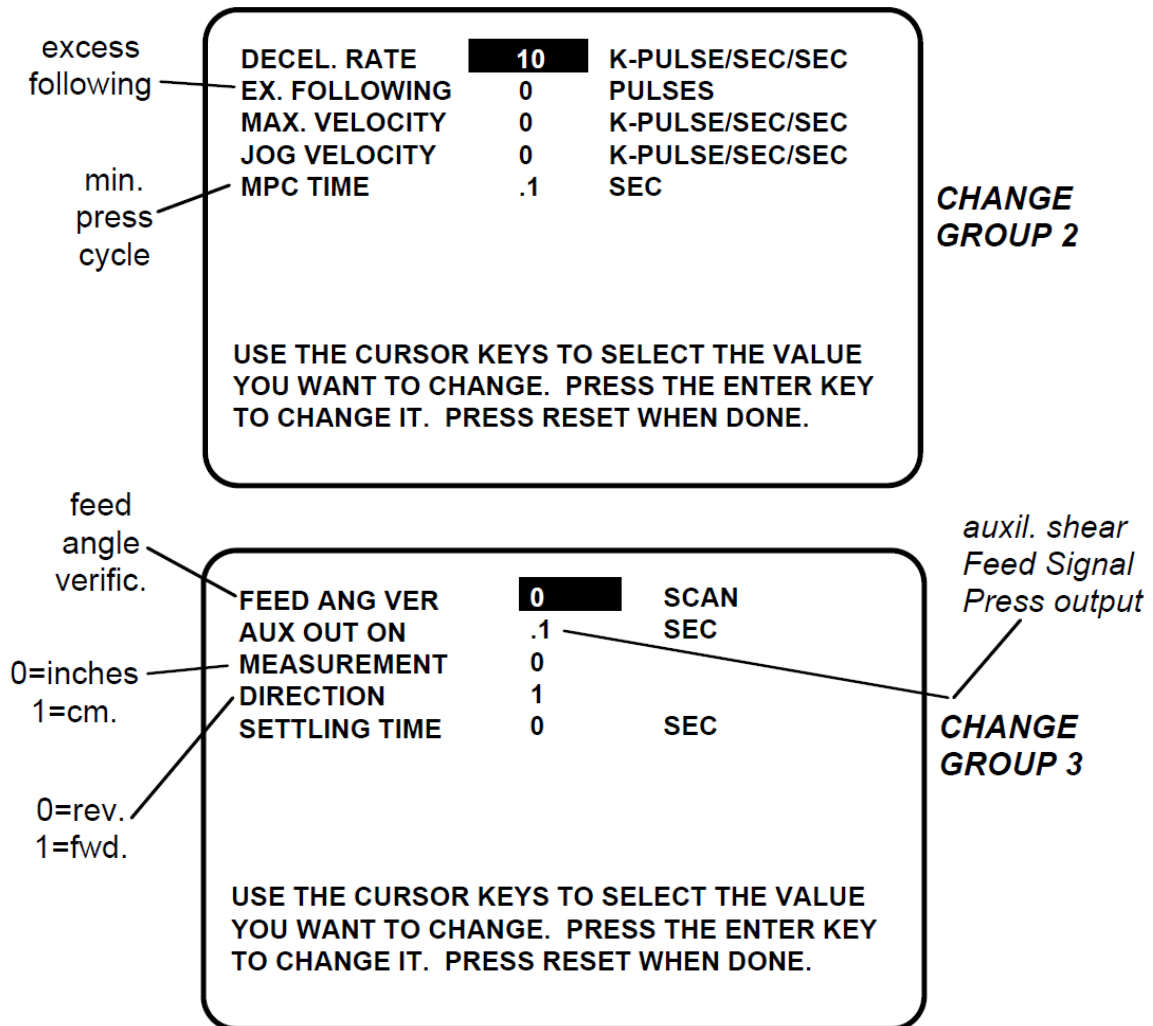


Figure 3-5. Change groups 2 and 3 displays for CPEC and ServoMaster

As with “Change group 1,” all the change group parameters in #2 and #3 are derived directly from your Coe CPEC or ServoMaster feed controller.

Notice in the illustration showing the “Change group 3” screen that you can set the unit of measurement for your Coe feed to either “0” (inches) or “1” (centimeters). *For simplicity sake, all the illustrations in this manual will display “inches.”*

“Direction” (also in Change group 3) designates the feed's direction — “0” for “reverse” or “1” for “forward.”

To properly understand how to set all of these parameters, refer to the Coe user manual for assistance.

## Check Setup for Coe CPEC and ServoMaster

When you select “Check setup,” you will see this display.

FEED LENGTH	<b>2.252</b>	INCHES
% ACCELERATION	50	%
% RUN SPEED	50	%
MIN. CYCLE TIME	.1	SEC

FOR VIEWING PURPOSES ONLY. PRESS THE  
RESET KEY WHEN DONE.

Figure 3-6. Check setup display for CPEC and ServoMaster

“Check setup” is a diagnostic tool available in the Coe CPEC and ServoMaster SFI which allows you to view the feed parameters in your servo feed controller. It gives you an opportunity to make sure that these parameters match your currently loaded setup.

Notice that you cannot change any of these items. This display is for viewing purposes only.

When you are done, press the Reset key to return to the Feed Control menu, and then one more time to go back to the main Initialization menu.

## Feed control for Coe BG2

If you have the COE BG2 feed controller linked with SmartPAC, select “Feed control” from the main Initialization menu. You use this display to initialize the Coe BG2 parameters. There is nothing else that must be initialized for the COE BG2 SFI.

ACCEL LIMIT	<b>0000</b>	IN / MIN / SEC
RUN SPEED LIMIT	0000	INCHES / MIN
SETTLING TIME	0	SEC

USE THE CURSOR KEYS TO SELECT THE VALUE  
YOU WANT TO CHANGE. PRESS THE ENTER KEY  
TO CHANGE IT. PRESS RESET WHEN DONE.

Figure 3-7. Feed control display for BG2

## Security access

You use this choice on the Initialization menu to lock out “Adjust feed” so that unauthorized personnel cannot perform adjust feed settings in Run mode.

### Locking Adjust feed

To prevent unauthorized personnel from unlocking “Adjust feed,” you must remove the Program/Run key once SmartPAC is switched to Run mode. This will prevent unauthorized access into the Initialization or Program modes, so that feed settings cannot be unlocked or altered. The key has to be positioned at “PROGRAM” to get into these modes.

Select “Security access” from the Initialization menu. Select “Program and Run modes” shown to the right of the action “Adjust feed,” as illustrated below. The default settings (settings made at the factory) allow this action to be made in Program and Run modes.

SECURITY ACCESS MENU	
LOAD TOOL #	PROGRAM AND RUN MODES
SET CNTR PRESET:	PROGRAM AND RUN MODES
CHANGE COUNT:	NO CHANGES ALLOWED
RESET MODE:	PROGRAM AND RUN MODES
ADJUST CAMS:	PROGRAM AND RUN MODES
ADJUST SENSORS:	PROGRAM AND RUN MODES
DISABLE SENSORS:	PROGRAM AND RUN MODES
ADJUST FEED:	<b>PROGRAM AND RUN MODES</b>
USE CURSOR KEYS TO MAKE CHOICES.	
PRESS THE ENTER KEY TO CHANGE THE MODES.	
PRESS THE RESET KEY WHEN DONE.	

Figure 3-8. Security Access display

To lock out the action so it cannot be taken in Run mode, press the Enter key. The setting is now locked out. You will see the words “Program mode only” next to the action. You will now see this display read “PROGRAM MODE ONLY” for “Adjust Feed.”

The feed controller can now be adjusted in the Program mode only. If you do not want to make a change, press Reset to go back to the Initialization menu.

## Position sensor to view communications

Select “Position sensor” from SmartPAC's main Initialization menu to verify communications between SmartPAC and the Coe feed controller. Press function key **F4** for “View communications.”

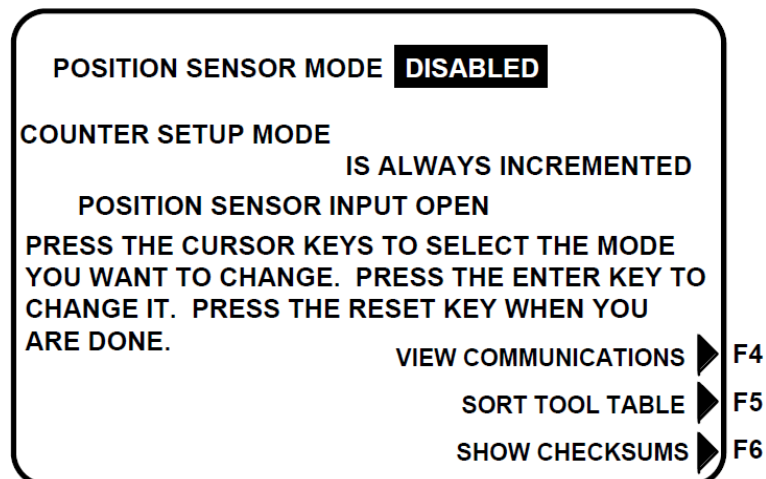


Figure 3-9. View communications at “Position sensor” display in Initialization

Now select “PORT 1 (SFI).”

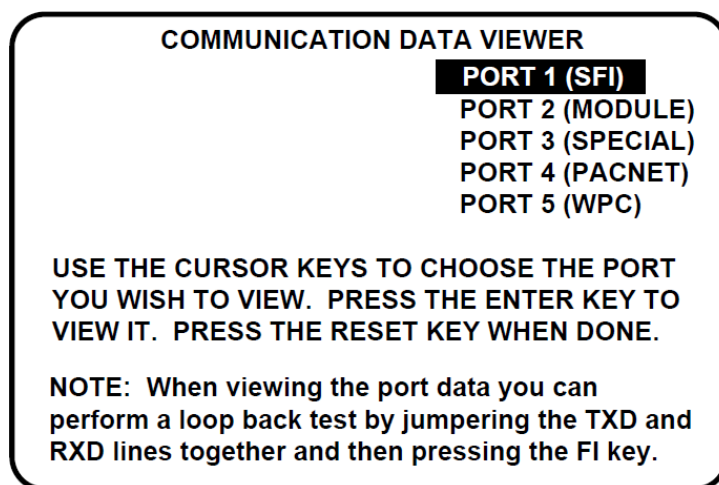


Figure 3-10. Communications data viewer screen

Here is the screen that will appear (see below).

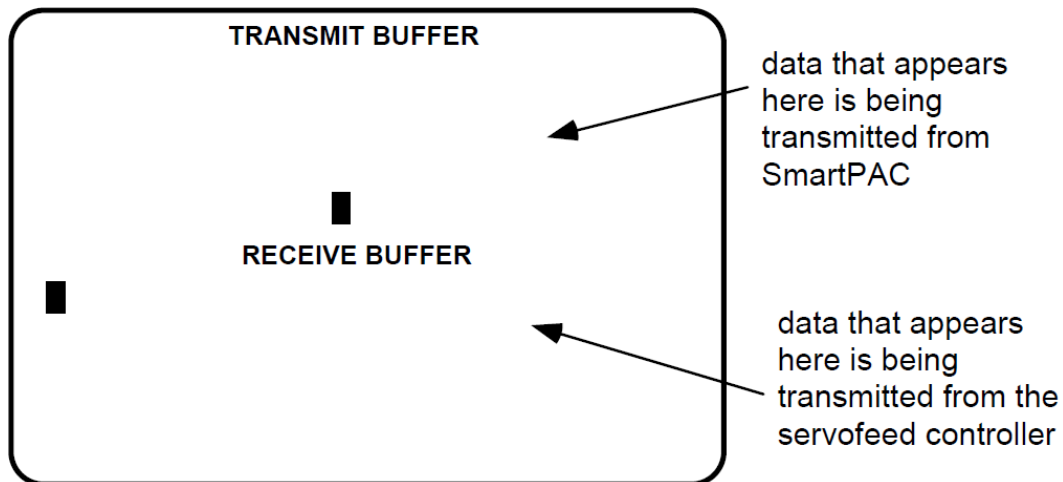


Figure 3-11. Actual communications

To view normal communications between SmartPAC and the Coe servofeed controller, you should expect to see some text (data) in both the “transmit buffer” and “receive buffer” locations on the above screen.

If you do not see any data (or only partial data), this means that SmartPAC and the Coe servofeed controller are not communicating properly.

At this point if you detect a problem in communications, you may decide to perform a “loop-back test.” A loop-back test is one where you connect (or jumper) the TXD (transmit) and RXD (receive) lines together (refer to Figure 9 at the end of the manual for RS232 and RS485 connections), and then press **F1** to check communications. In effect, you are actually “receiving” the communications data that you are transmitting.

This test is useful when verifying the accuracy of the transmit and receive hardware and wiring. If you need further assistance or direction on performing the loop-back test, contact Wintriss Tech Support.

## Section 2 1500 Series

### Initialization menu

#### NOTICE

##### REFER TO COE SERVO FEED MANUAL

This manual mentions certain parameters that you can modify at your Coe servo feed. It does not, however, explain these parameters in great detail. Refer to your Coe servo feed manual for more information.

To get into Initialization mode, turn the Program/Run key to “PROGRAM” and then press both the left and right “ANGLE-OFF” keys at the same time for one second. (See “Using the keyboard” in Chapter 3 of the applicable 1500 unit's user manual)

#### NOTICE

##### RETURN TO FIRST DISPLAY IN MODE BEFORE CHANGING MODES

Before changing modes (for instance -- from Initialization to Program), make sure your screen shows the first display in the mode you are in. If that display is not shown, nothing will happen when you turn the Program /Run key. In that case, keep pressing the RESET key. When the first display in the mode is reached, you will instantly switch to the new mode.

Here is the first display in Initialization mode. From this display, select “Feed parameters 1.”

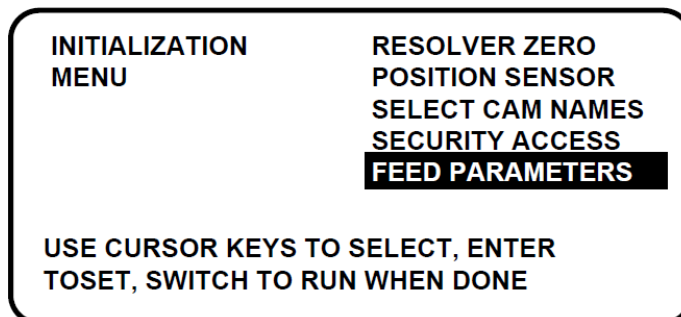


Figure 3-12. Selecting “Feed Parameters” from the Initialization menu (the exact order on your display may vary depending upon installed options)

## Feed parameters for Coe CPEC and ServoMaster

### NOTICE

#### REFER TO COE SERVO FEED MANUAL BEFORE INITIALIZING SETTINGS

Consult your Coe servo feed manual (or your Coe representative) to properly initialize these settings. Remember, the 1500 unit does not change the way the servo feed operates or any parameters or limitations built into your servo feed. Be sure you have read the manual and understand how your servo feed works before making any setting changes.

Once you have selected “Feed parameters,” here is the display you will see. You use this menu choice to initialize the Coe CPEC or ServoMaster parameters. Select “Change group 1” to see the next menu.

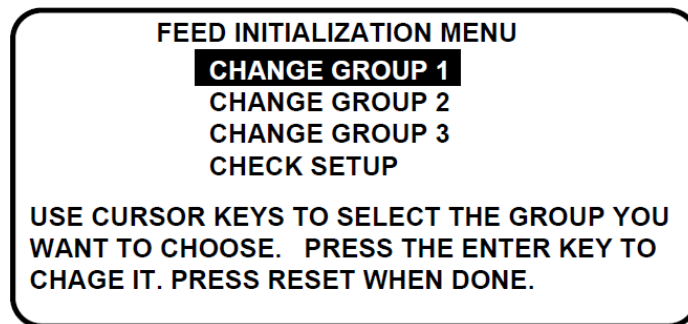


Figure 3-13. Feed Parameters menu for CPEC and ServoMaster

Notice in the following illustration that actual values appear on the screen. These values are coming directly from your Coe servo feed controller. Select the item you want to change.

In our example, we have chosen the first item, “F constant #1.”

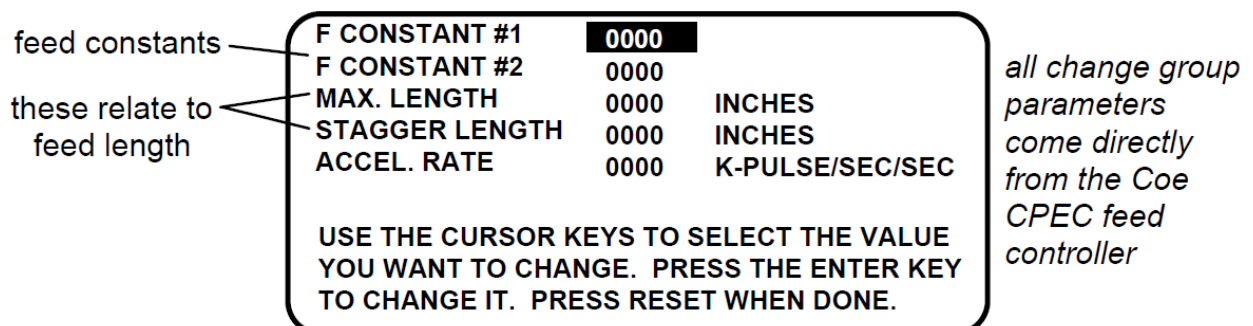


Figure 3-14. Change group 1 display for CPEC and ServoMaster

You use the cursor keys to input numeric values for SFI parameters. When you are done entering a number, press Enter. The 1500 unit will accept the number and move on to the next display. The 1500 unit accepts numbers up to seven digits in length.



All the change group parameters are derived directly from your Coe CPEC or ServoMaster feed controller. Notice in the illustration showing the “Change group 1” screen that “Max. length” and “Stagger length” both refer to feed length.

To properly understand how to set all of these parameters, refer to the Coe user manual for assistance.

When you are done with all the parameters on the “Change Group 1” display, press the Reset key to return to the Feed Parameters menu.

If you want to change groups 2 or 3, select that item on the Feed Parameters menu and then follow the previous steps. This is how each of these displays look.

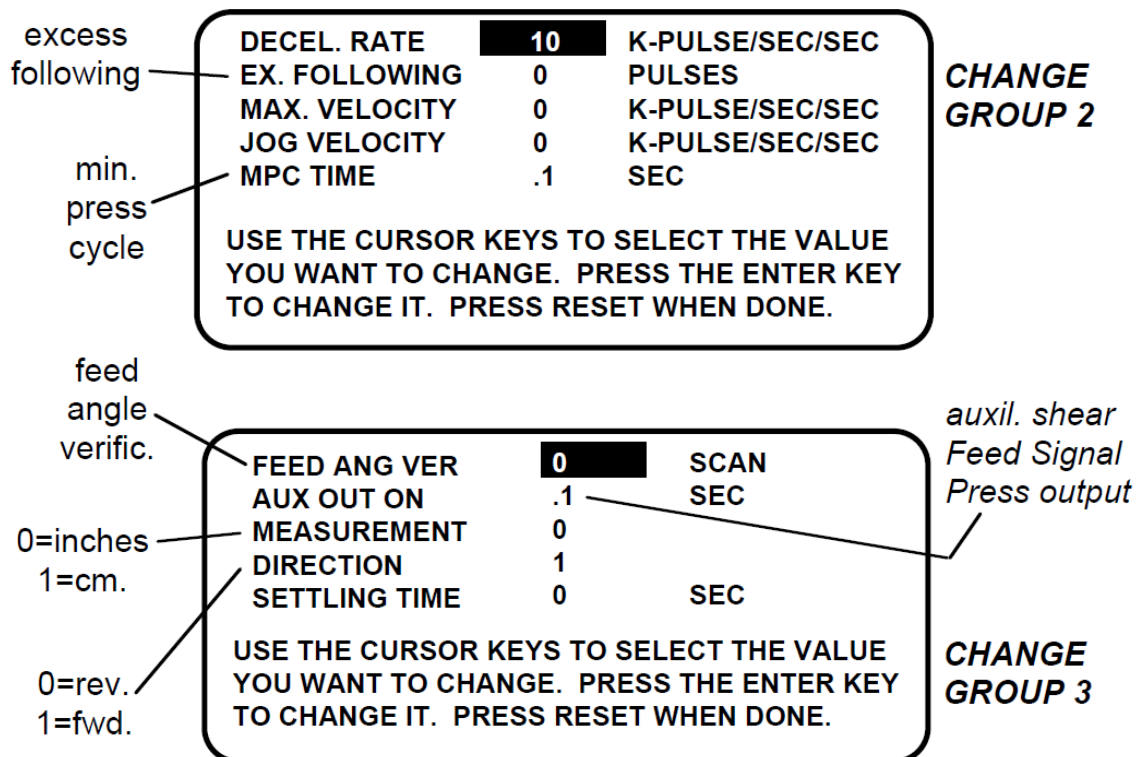


Figure 3-15. Change groups 2 and 3 displays for CPEC and ServoMaster

As with “Change group 1,” all the change group parameters in #2 and #3 are derived directly from your Coe CPEC or ServoMaster feed controller.

Notice in the illustration showing the “Change group 3” screen that you can set the unit of measurement for your Coe feed to either “0” (inches) or “1” (centimeters). *For simplicity sake, all the illustrations in this manual will display “inches.”*

“Direction” (also in Change group 3) designates the feed's direction — “0” for “reverse” or “1” for “forward.”

To properly understand how to set all of these parameters, refer to your Coe user manual

## Check Setup for Coe CPEC and ServoMaster

When you select “Check setup,” you will see this display.

FEED LENGTH	<b>2.252</b>	INCHES
% ACCELERATION	50	%
% RUN SPEED	50	%
MIN. CYCLE TIME	.1	SEC
FOR VIEWING PURPOSES ONLY. PRESS THE RESET KEY WHEN DONE.		

Figure 3-16. Check setup display for CPEC and ServoMaster

“Check setup” is a diagnostic tool available in the Coe CPEC and ServoMaster SFI which allows you to view the feed parameters in your servo feed controller. It gives you an opportunity to make sure that these parameters match your currently loaded setup.

Notice that you cannot change any of these items. This display is for viewing purposes only.

When you are done, press the Reset key to return to the Feed Control menu, and then one more time to go back to the main Initialization menu.

## Feed parameters for Coe CPEC and ServoMaster

If you have the COE BG2 feed controller linked with your 1500 unit, select “Feed parameters.” You use this display to initialize the Coe BG2 settings. If you have a ProCam 1500, there is nothing else that must be initialized for the COE BG2 SFI.

However, if you have a DiPro 1500, you still need to initialize “Feed parameters 2.” Refer to the sections, “Locking Adjust feed at DiPro 1500” and “Auto Advance and Slow RPM in DiPro 1500” later in this chapter.

ACCEL LIMIT	<b>0000</b>	IN / MIN / SEC
RUN SPEED LIMIT	0000	INCHES / MIN
SETTLING TIME	0	SEC
USE THE CURSOR KEYS TO SELECT THE VALUE YOU WANT TO CHANGE. PRESS THE ENTER KEY TO CHANGE IT. PRESS RESET WHEN DONE.		

Figure 3-17. Feed control display for BG2

## Security Access

### Locking Adjust feed at ProCam 1500

To prevent unauthorized personnel from unlocking “adjust feed,” you must remove the Program/Run key once ProCam is switched to Run mode. This will prevent unauthorized access into the Initialization or Program modes, so that feed settings cannot be unlocked or altered. The key has to be positioned at “PROGRAM” to get into these modes.

Select “Security access” from the Initialization menu. Select “Program and Run modes” shown to the right of the action “Adjust feed,” as illustrated below. The default settings (settings made at the factory) allow this action to be made in Program and Run modes.

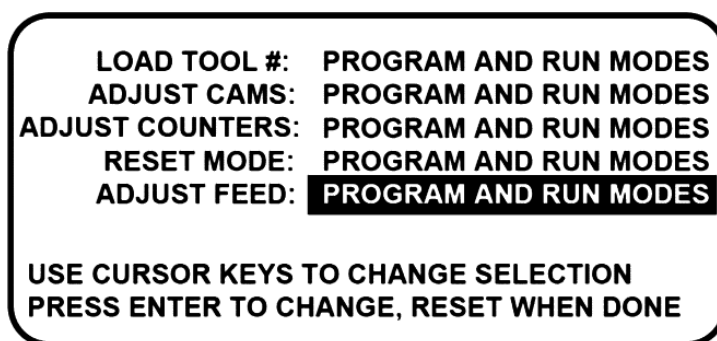


Figure 3-18. Security Access display

To lock out the action so it cannot be taken in Run mode, press the ENTER key. The setting is now locked out. You will see the words “Program mode only” next to the action. You will now see this display.

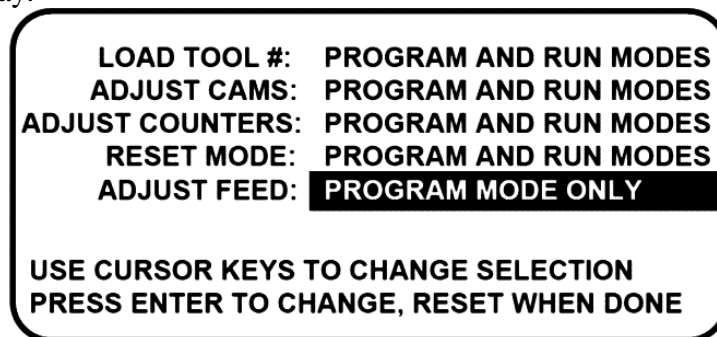


Figure 3-19. Locking out “Adjust feed”

The feed controller can now be adjusted in the Program mode only. If you do not want to make a change, press RESET to go back to the Initialization menu.

## Locking Adjust feed at DiPro 1500

### NOTICE

#### ABOUT THE DIPRO 1500'S AUTO ADVANCE AND SECURITY

With DiPro 1500, "Auto advance" and "Adjust Feed" "security are not main Initialization choices. SFI was not originally offered with DiPro 1500. Therefore, feed-specific selections are grouped together as a part of the Feed Initialization. "Auto Advance" and "Adjust Feed" are a sub-choice under "Feed Parameters 2." Only DiPro 1500's Channel 1 can be an auto channel with SFI.

To prevent unauthorized personnel from unlocking "adjust feed," you must remove the Program/Run key once DiPro is switched to Run mode. This will prevent unauthorized access into the Initialization or Program modes, so that feed settings cannot be unlocked or altered. The key has to be positioned at "program" to get into these modes.

Notice that the highlight bar is over "Program and Run Modes" shown to the right of the action "Adjust feed," as illustrated below. The default settings (settings made at the factory) allow this action to be made in Program and Run modes.

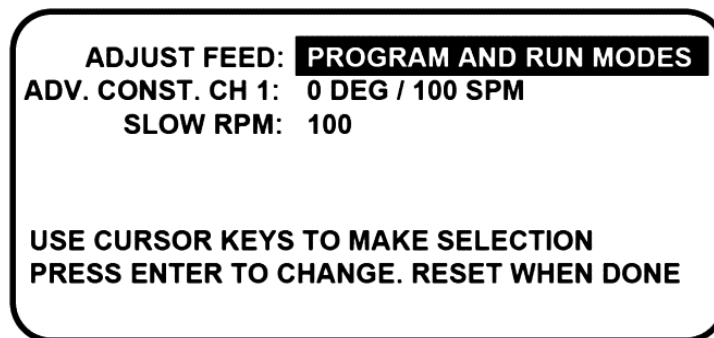


Figure 3-20. Feed Parameter 2 display featuring feed security

To lock out the action so it cannot be taken in Run mode, press the ENTER key. The setting is now locked out. You will see the words "**Program mode only**" next to the action.

The feed controller can now be adjusted in the Program mode only. If you do not want to make a change, simply press RESET to go back to the Initialization menu.

## Auto Advance and Slow RPM in DiPro 1500

### Determining the advance constant for DiPro 1500's channel 1 Automatic Speed Compensation

You use this choice in the Initialization menu to set an auto advance constant for the press auto advance function for cam channel 1. Some cam functions that may use auto advance are feed advance or pilot release. This feature works best on presses that have speed ranges of several hundred to over a thousand strokes per minute.

Advance constant is equal to the number of degrees of advance per 100 RPM increase in press speed.

$$A.C. = \#^\circ / 100 \text{ RPM}$$

To calculate the auto advance constant for pilot release, follow these steps:

1. Determine the fastest press speed (RPMa) and the optimum angle at which the pilot release cam should turn on at this speed (Aa).
2. Determine the slowest press speed (RPMb) and the optimum angle at which the pilot release cam should turn on at this speed (Ab).
3. Subtract the two angle values. We will call this result "Ac."

$$Aa - Ab = Ac$$

4. Subtract the two press speeds. We will call this result "RPMc."

$$RPMa - RPMb = RPMc$$

5. Divide Ac (the difference between the angles) by RPMc (the difference between the press speeds), and multiply that value by 100. That is the number of degrees per 100 RPM.

$$\frac{Ac}{RPMc} \times 100 = \#^\circ / 100 \text{ RPM}$$

Example for calculating the auto advance setting:

Your fastest speed is 100 RPM and the pilot release angle is at 75°.

Your slowest speed is 50 RPM and the pilot release angle is at 100°.

Subtract 100 RPM from 50 RPM.

$$100 - 50 = 50$$

Subtract 100° from 75°.

$$100 - 75 = 25$$

Divide the difference in angles by the difference in RPM, and multiply this by 100.

50° is your advance constant.

$$\frac{25}{50} \times 100 = 50.00 \Rightarrow \underline{50^\circ / 100 \text{ RPM}}$$

## NOTICE

### MORE ON ADVANCE CONSTANT SETTINGS

You can make only one advance constant setting. This advance constant that you set in Initialization will automatically affect channel 1, but it will not be displayed as an "auto" setting in Program or Run modes.

If you do not wish to use the Auto Advance feature function, you must leave the "advance constant" value equal to zero (0).

Auto Advance does not function if channel 1 had been programmed as a "timed output." See Chapter 5 in the DiPro 1500 user manual for more information about making cam channel settings.

**NOTICE****IMPORTANT TO SET SLOW RPM**

When you determine the correct auto advance constant, you also must identify the “Slow RPM,” or the slowest speed at which you will run your press. DiPro uses that value as a starting point to begin the auto advance process. If an incorrect number had been entered in “slow RPM,” DiPro will not begin to auto advance at the right time. In our example, slow RPM should be set to 50.

**Setting the advance constant and slow RPM for DiPro 1500**

Select “ADV. CONST. CH 1” by moving the highlight bar to the second line of the “Feed parameters 2” display and then pressing the ENTER key (see below). Notice that the prompt at the bottom of the screen has changed.

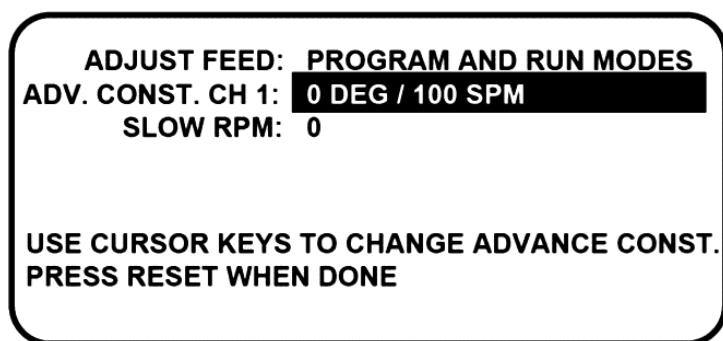


Figure 3-21. Setting Advance constant at channel 1

To set “ADV. CONST. CH. 1,” simply use the up or down CURSOR keys on your DiPro 1500 keypad. The range for this value is from 0-500.

To set “SLOW RPM,” move the highlight bar to the third line of the “FEED PARAMETERS 2” display, and then press ENTER. Here again, the prompt at the bottom of the screen has changed and now reads: “USE CURSOR KEYS TO CHANGE SLOW RPM. PRESS RESET WHEN DONE.” As before, use the up or down CURSOR keys on your DiPro 1500 keypad. The range for this value is from 0-2000. Notice that the number increases or decreases in multiples of 5.

---

# Chapter 4 – Program mode for Coe SFI

---

In this chapter you will learn how to use the Coe SFI menus in Program mode. These functions include:

- Setting feed parameters
- Using the Feed Advisor
- Loading feed settings

Each of these sections provides you with detail on operating the Coe servo feed with the applicable Wintriss control. If you need more assistance in using the Wintriss product, have the actual user manual handy.

## **NOTICE**

### **REFER TO COE SERVO FEED MANUAL**

This manual mentions certain parameters that you can modify at your Coe servo feed. It does not, however, explain these parameters in great detail. Refer to your Coe servo feed manual for more information.

## **Section 1 SmartPAC**

### **About Tool number**

A tool number consists of all the programmed settings (including the servo feed settings) that you make for one job. You can save servo-feed information for up to 200 tools and then recall these settings for each job whenever you need to.

### **Program menu**

Go into Program mode, by turning the Program/Run key to “Run” and then back to “Program.” Next, select a tool number to modify, and then select “Modify the tool number information.” If you are not sure how to do this, refer to Chapter 5 in the SmartPAC user manual.

### **SELECT = HIGHLIGHT + ENTER**

To SELECT an item, use the Wintriss control cursor keys to highlight the item and then press the Wintriss control’s ENTER key. (See your Wintriss product user manual.)

Once you have selected a tool to modify, you will see a display which lists the various settings you can make for the tool. Select “Feed Control,” as shown below.

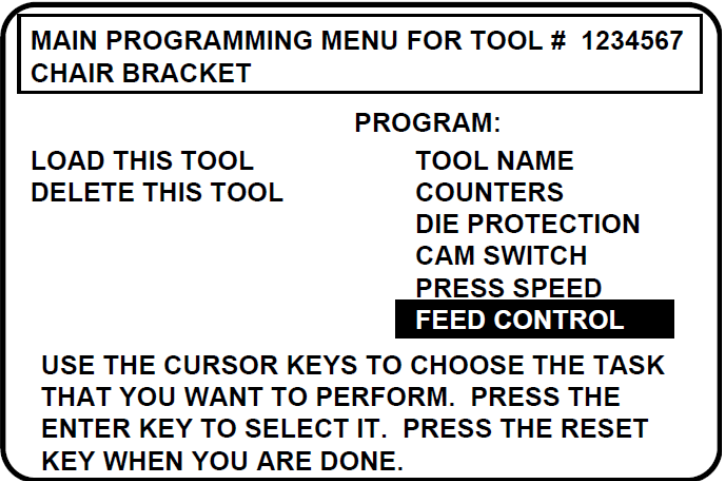


Figure 4-1. Selecting “Feed Control” in Program mode (the exact order on your display may vary depending upon installed options)

Here is the “Feed Control” display. Here are the available choices. *Notice that “Pilot Time” is ONLY available if you are interfacing with the Coe BG2 feed controller.*

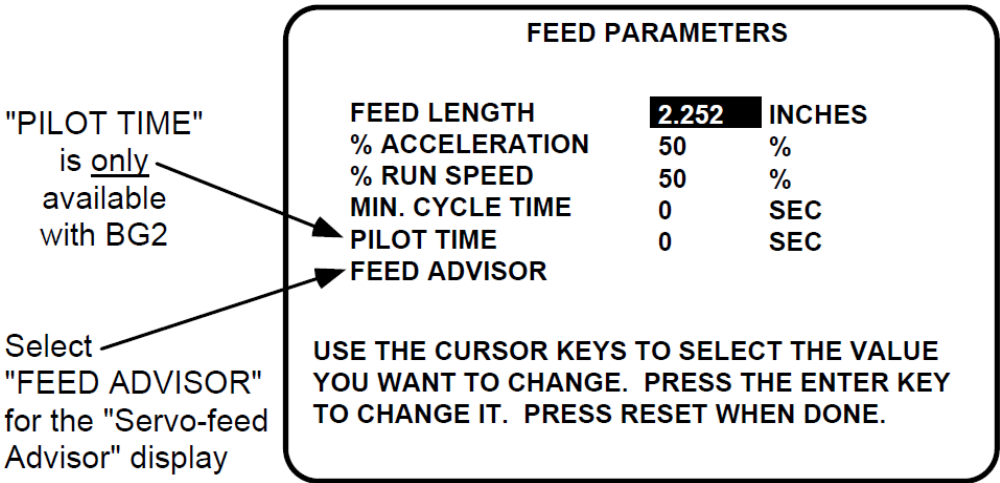


Figure 4-2. Feed settings

**NOTICE**

**READ YOUR SERVO FEED MANUAL FIRST**

This manual mentions certain parameters that you can modify at your Coe servo feed. It does not, however, explain these parameters in great detail. Refer to your Coe servo feed manual for more information.



## Feed parameters

When you select “Feed length“ , a number display appears over the Feed Parameters screen that allows you to set this value.

Use the number keys to input numeric values for SFI parameters. When you are done entering a number using the number keypad, press Enter. SmartPAC will accept the number and move on to the next display. SmartPAC accepts numbers up to seven digits in length. Go to Chapter 3 of the SmartPAC user manual if you are not sure how to use the number display.

If you wish to leave this screen without making a change, press Reset.

If you decide to use the “Feed Advisor,” go to the next section for a complete explanation. Remember to read your servo feed manual before making feed settings.

## Feed Advisor

You select “Feed Advisor” when you want SmartPAC SFI to figure out the acceleration % and run speed % variables for you.

Feed Advisor is a convenience which saves you the time of calculating the acceleration % and run speed % variables yourself. You need to enter feed length, feed arc (number of crankshaft degrees available to fully feed the material), and press speed when using Feed Advisor. When determining the acceleration % and run speed % variables, take into consideration the feed initiate angle, which may be programmed as one of the cam timings in SmartPAC (not SFI).

Here is an example of a situation to avoid. If a 225 degree feed arc is assumed in the Feed Advisor but only 220 degrees is truly available to be fed up, punch engagement may occur before the feed is complete and a die crash may occur. Make sure that you know the actual number of degrees needed to feed up the material and that the feed initiate angle is correctly set.

Here is how Feed Advisor works with the information that you provided to it. Let's say your feed length is 2.252 inches. Also, let's say the number of degrees you have to feed in is 225° with the feed initiate ON angle set at 260°, and the press speed is 150 SPM. You want Feed Advisor to calculate properly based upon these values.

## How to use Feed Advisor

Select “Feed Advisor” on the “Feed Control” display. Select each item on the screen, and then enter new values. Remember to use the number and cursor keys to set the value and the Enter key to confirm your selection.

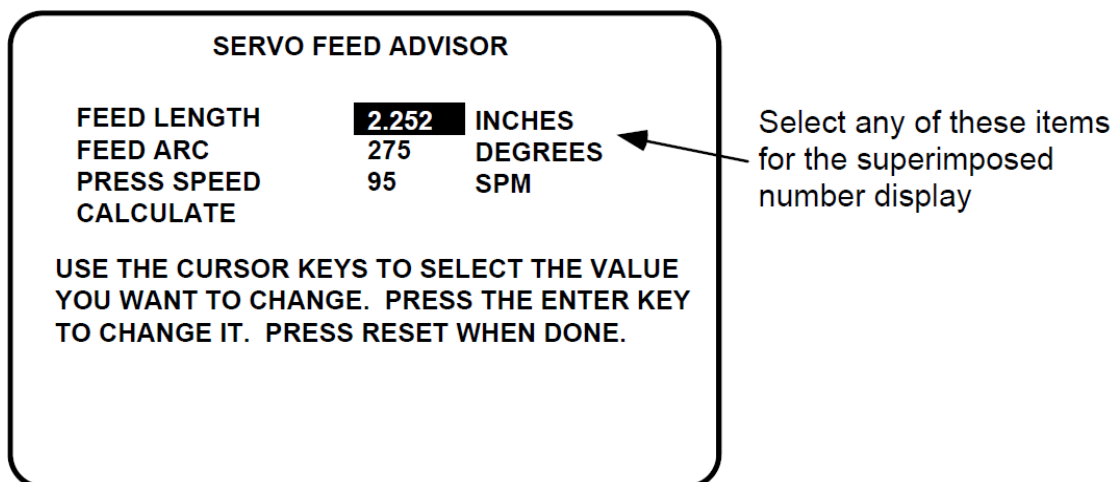


Figure 4-3. "Servo Feed Advisor" display

Once you have entered these values, select "Calculate." When you press Enter, Feed Advisor calculates the acceleration % and run speed % variables. This message quickly flashes on the screen.

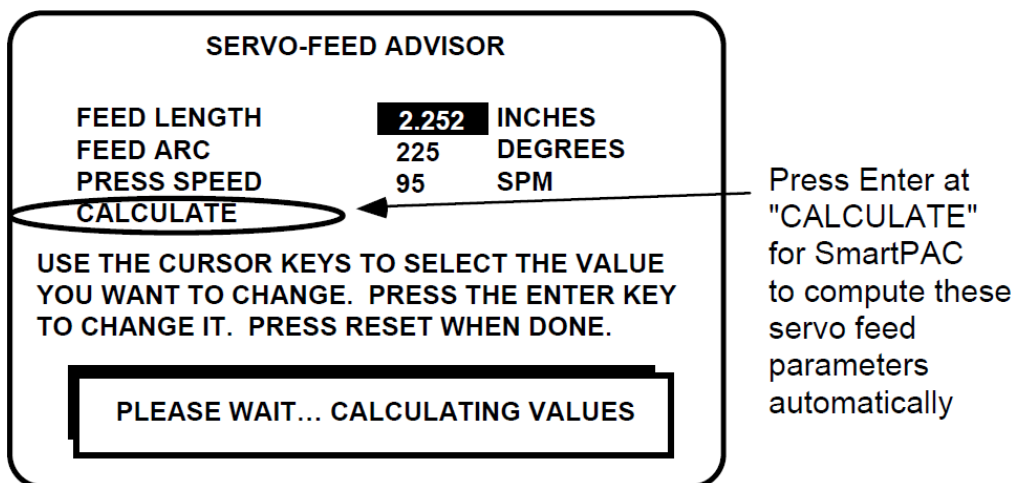


Figure 4-4. Selecting "Calculate" on the Servo Feed Advisor display

Then Feed Advisor tells you if the items you entered are valid for that press speed. For instance, if Feed Advisor determines that the feed has plenty of time to complete based on the values entered, you will see this message at the bottom of the "Feed Advisor" screen:

*THE MATERIAL WILL BE FED UP WELL BEFORE  
THE FEED ARC IS COMPLETED.*

This means that the feed will end well before the end of the feed arc you have entered even when it was operating at the lowest speed specified in Initialization.

If you see this message:

*THE MATERIAL WILL BE FED UP JUST AS  
THE FEED ARC IS COMPLETED.*

... this means that the feed will end just as the feed arc is completed. This is the optimum condition because the feed never had to reach the maximum speed specified in Initialization. If you entered values that will not allow the feed to complete before the end of the feed arc, you see this message:

*THE MATERIAL CANNOT BE FED UP IN TIME.  
MORE TIME MUST BE ALLOWED.*

In this case, recheck your values. It might just be a matter of lengthening the feed arc if that will not affect other actions, such as part transfer or part cut off. If you choose to lengthen the arc, make sure that you reprogram the cam angle to initiate the feed earlier. If you cannot do that, your other option is decreasing press speed. In any case, revise your figures if SmartPAC gives you a warning. Then “calculate” Feed Advisor again.

When you get a good calculation, press the Reset key. You will see the acceleration % and run speed % variables for your setup is automatically revised by Feed Advisor.

## **NOTICE**

### **ABOUT USING FEED ADVISOR**

You can use Feed Advisor any time that you want SmartPAC to calculate the acceleration % and run speed % variables for you. If you want to manually enter your own feed parameters, select the appropriate items on the “Feed Parameters” screen.

Remember to program the “Feed Initiate angle” as the “on” angle of the “Feed Advance” cam in SmartPAC ProCamPAC.

## **Load by tool number**

You can automatically load feed settings by tool number. To load a tool number, press Reset twice, the first time to exit from the “Feed parameters” display and then again to get to the “Load tool number” screen. Press Enter to load (or Reset to back out). You will get a message like this one which confirms that you have successfully loaded the tool (your tool number may be different):

*PLEASE WAIT ... LOADING TOOL 1*

How to load by tool numbers is covered in detail in Chapter 5 (Program mode) and Chapter 6 (Run mode) of the SmartPAC user manual.

## Section 2 1500 Series

### About Tool number

A tool number consists of all the programmed settings (including the servo feed settings) that you make for one job. You can save servo-feed information for up to 200 tools and then recall these settings for each job whenever you need to.

### Program menu

Go into Program mode, by turning the Program/Run key to “Run” and then back to “Program.” Next, select a tool number to modify, and then select “Modify the tool number information.” If you are not sure how to do this, refer to Chapter 5 in the applicable 1500 unit's user manual.

#### **SELECT = HIGHLIGHT + ENTER**

To SELECT an item, use the Wintriss control cursor keys to highlight the item and then press the Wintriss control's ENTER key. (See your Wintriss product user manual.)

Once you have selected a tool to modify, you will see a display which lists the various settings you can make for the tool. Select “Set feed,” as shown below.

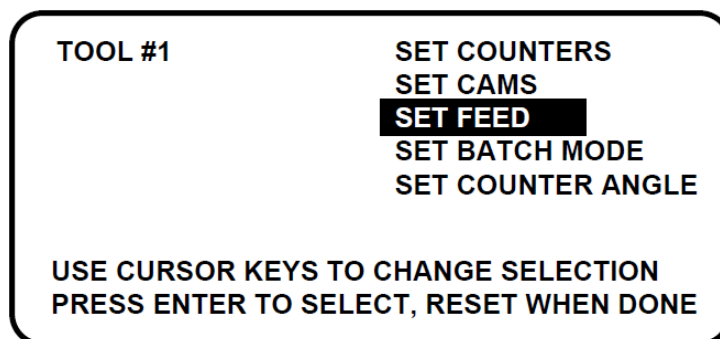


Figure 4-5. Selecting “Set feed” in Program mode (the exact order on your display may vary depending upon installed options)

### **NOTICE**

#### **READ YOUR SERVO FEED MANUAL FIRST**

Consult your Coe servo feed manual for any requirements you must meet for feed length and other settings. Remember, the 1500 unit does not change the way the servo feed operates or any parameters or limitations built into your servo feed. Be sure you have read the manual and understand how your servo feed works before making any settings.

Here is the “Set feed” display (below). Here are the available choices. *Notice that “Pilot Time” is ONLY available if you are interfacing with the Coe BG2 feed controller.*

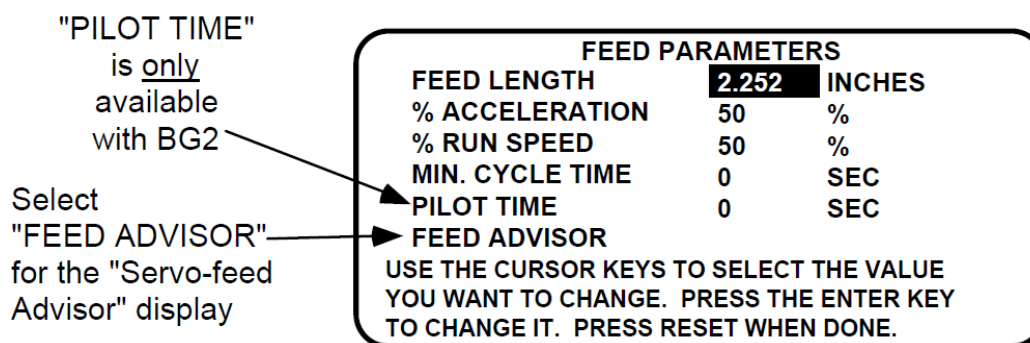


Figure 4-6. Feed settings

## Feed settings

When you select "Feed length," a new display appears that allows you to set this value. See the next illustration.

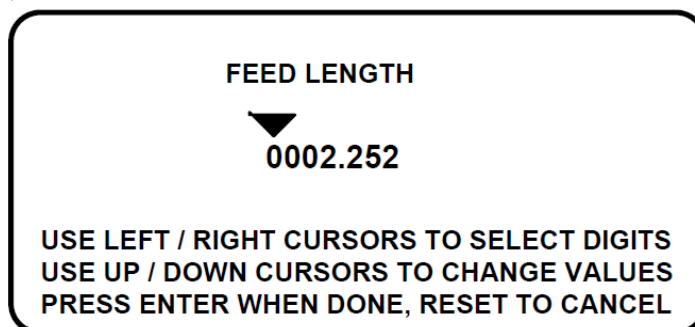


Figure 4-7. Setting Feed length

As the display indicates, use the left and right, as well as the up and down CURSOR keys. Press the left and right CURSOR keys to position the triangular-shaped pointer over the desired digit, and then press the up and down CURSOR keys to increase or decrease the value, one step at a time. If you need assistance, Chapter 3 in the applicable 1500 unit's user manual explains how to use these keys. When you are satisfied with the value, press the ENTER key. However, if you wish to leave this screen without making a change, press RESET.

If you decide to use the "Feed Advisor," go to the next section for a complete explanation. Remember! It is also a very good idea to read your servo feed manual before making feed settings!

## Feed Advisor

You select "Feed Advisor" when you want SFI to figure out the acceleration % and run speed % variables for you.

Feed Advisor is a convenience which saves you the time of calculating the acceleration % and run speed % variables yourself. You need to enter feed length, feed arc (number of crankshaft degrees available to fully feed the material), and press speed when using Feed Advisor. When determining the acceleration % and run speed % variables, take into consideration the feed initiate angle, which may be programmed as one of the cam timings in the 1500 unit (not SFI).

Here is an example of a situation to avoid. If a 225 degree feed arc is assumed in the Feed Advisor but only 220 degrees is truly available to be fed up, punch engagement may occur before the feed is complete and a die crash may occur. Make sure that you know the actual number of degrees needed to feed up the material and that the feed initiate angle is correctly set.

Here is how Feed Advisor works with the information that you provided to it. Let's say your feed length is 2.252 inches. Also, let's say the number of degrees you have to feed in is 225° with the feed initiate ON angle set at 260°, and the press speed is 150 SPM. You want Feed Advisor to calculate properly based upon these values.

### How to use Feed Advisor

Select "Feed Advisor" on the "Set Feed" display (see below). Select each item on the screen, and then enter new values. Remember to use the number and cursor keys to set the value and the Enter key to confirm your selection.

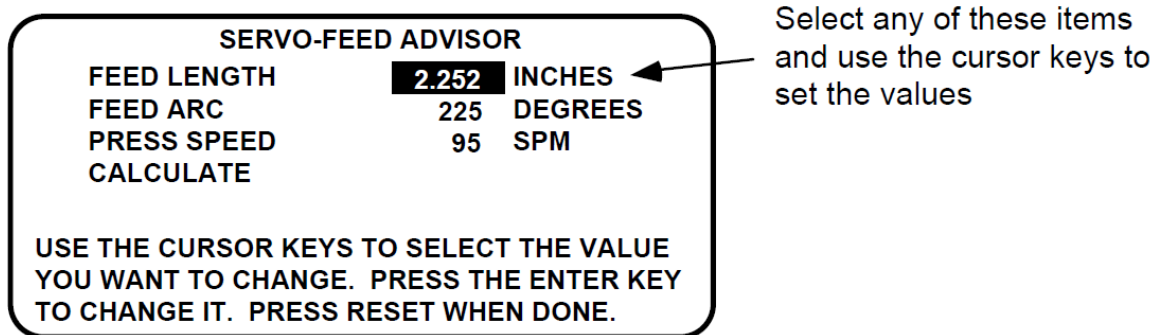


Figure 4-8. Servo Feed Advisor" display

Once you have entered these values, select "Calculate," and press Enter.

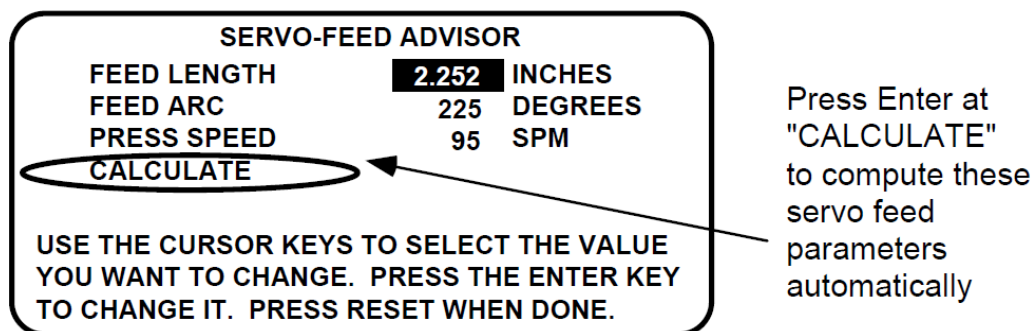


Figure 4-9. Selecting "Calculate" on the Servo Feed Advisor display

Once you press ENTER, Feed Advisor calculates the acceleration % and run speed % variables. This message quickly flashes on the screen.

*PLEASE WAIT ... CALCULATING PARAMETERS*

Then Feed Advisor tells you if the values you entered are valid for that press speed. For instance, if Feed Advisor determines that the feed has plenty of time to complete based on the values entered, you will see this message at the bottom of the “Feed Advisor” screen:

*THE MATERIAL WILL BE FED UP WELL BEFORE  
THE FEED ARC IS COMPLETED.*

This means that the feed will end well before the end of the feed arc you have entered.

If you see this message:

*THE MATERIAL WILL BE FED UP JUST AS  
THE FEED ARC IS COMPLETED.*

... this means that the feed will end just as the feed arc is completed. This is the optimum condition. If you entered values that will not allow the feed to complete before the end of the feed arc, you see this message:

*THE MATERIAL CANNOT BE FED UP IN TIME.  
MORE TIME MUST BE ALLOWED.*

In this case, recheck your values. It might just be a matter of lengthening the feed arc if that will not affect other actions, such as part transfer or part cut off. If you cannot do that, your other option is decreasing press speed. In any case, revise your figures if the 1500 unit gives you a warning. Then “calculate” Feed Advisor again.

When you get a good calculation, press the Reset key. You will see the acceleration % and run speed % variables for your setup is automatically revised by Feed Advisor.

## **NOTICE**

### **ABOUT USING FEED ADVISOR**

You can use Feed Advisor any time that you want the 1500 unit to calculate the acceleration % and run speed % variables for you. If you want to manually enter your own feed parameters, select the appropriate items on the “Feed Parameters” screen.

Remember to program the “Feed Initiate angle” as the “on” angle of the “Feed Advance” cam in the 1500 unit

## **Load by tool number**

You can automatically load feed settings by tool number. To load a tool number, press RESET twice, the first time to exit from the “Feed parameters” display and then again to get to the “Load tool number” screen. Press ENTER to load (or RESET to back out). You will get a message like this one which confirms that you have successfully loaded the tool (your tool number may be different):

*PLEASE WAIT ... LOADING TOOL 1*

How to load by tool numbers is covered in Chapters 5 (Program mode) and 6 (Run mode) of the applicable 1500 unit's user manual.





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# Chapter 5 – Run mode for Coe SFI (CPEC and ServoMaster only)

---

In this chapter you will learn how to use the Coe CPEC and ServoMaster SFI menus in Run mode. Specifically you will adjust feed parameters while operating the press.

## **NOTICE**

### **COE BG2 NOT INCLUDED IN THIS CHAPTER**

This chapter specifically discusses the Wintriss servo feed interface with the Coe CPEC or ServoMaster feed controller. The COE BG2 feed controller does not support any of the Wintriss controls in the Run mode.

Each of these sections provides you with detail on operating the Coe CPEC or ServoMaster servo feed with the applicable Wintriss control. If you need more assistance in using the Wintriss product, have the actual user manual handy.

## **NOTICE**

### **READ YOUR COE SERVO FEED MANUAL FIRST**

Consult your Coe servo feed manual for any requirements you must meet for feed length and other CPEC and ServoMaster settings. Remember, the Wintriss control does not change the way your servo feed operates or any parameters or limitations built into your servo feed. Be sure you have read your servo feed manual and understand how your servo feed works before making any settings.

## **Section 1 SmartPAC**

### **About Tool numbers**

A tool number consists of all of the settings (including the servo feed settings) that you make for one job. You can save servo feed information for up to 200 tools and then recall the settings for each job whenever you need to.

### **SELECT = HIGHLIGHT + ENTER**

To SELECT an item, use the Wintriss control cursor keys to highlight the item and then press the Wintriss control's ENTER key. (See your Wintriss product user manual.)

## Run menu

While you are running the press, SmartPAC will operate the Coe CPEC or ServoMaster servo feed based upon the settings you made in Program mode, and in some cases, you can make minor adjustments to the currently loaded tool number.

To use Run mode, turn the Program/Run key to “Run,” and you will see the next screen.

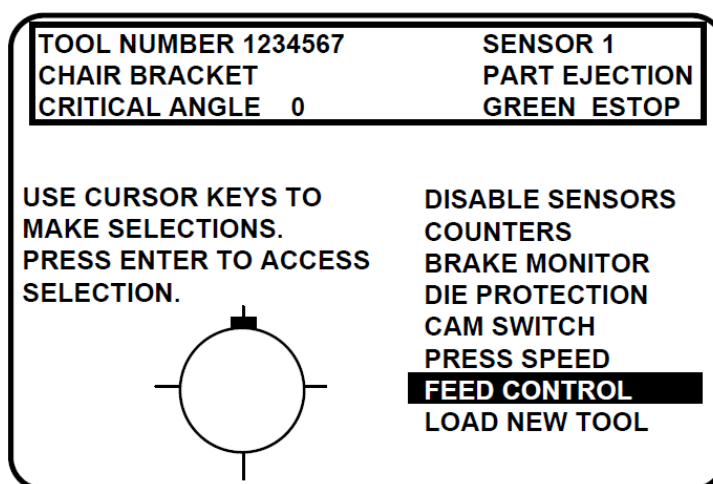


Figure 5-1. Run menu for CPEC and ServoMaster (the exact order on your display may vary depending upon installed options)

To adjust feed settings, select “Feed control.” As the display indicates, you can adjust “Feed length.”

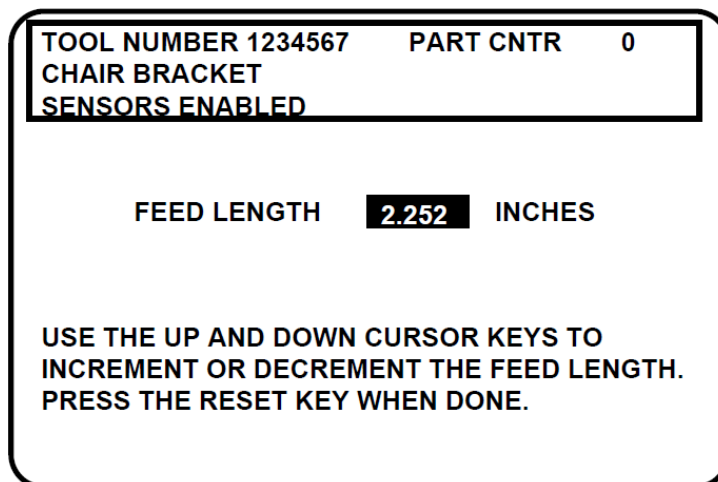


Figure 5-2. Adjusting feed parameters for CPEC and ServoMaster

You can make minor adjustments (if available) using the up and down cursor keys. Notice as you press either key, the value changes by .001 inch (1/1000) or less. This information is directly sent to the servo feed and is immediately saved to the currently loaded tool. Be sure to make a note of this change to your feed setup sheet for future reference. Press the Reset key to exit from this display.

## Section 2 1500 series

### About Tool numbers

A tool number consists of all of the settings (including the servo feed settings) that you make for one job. You can save servo feed information for up to 200 tools and then recall the settings for each job whenever you need to.

### Run menu

While you are running the press, the 1500 unit will operate the servo feed based upon the settings you made in Program mode. In some cases, you can make minor adjustments to the currently loaded tool number. To use Run mode, turn the Program/Run key to “Run.” You will see this screen.

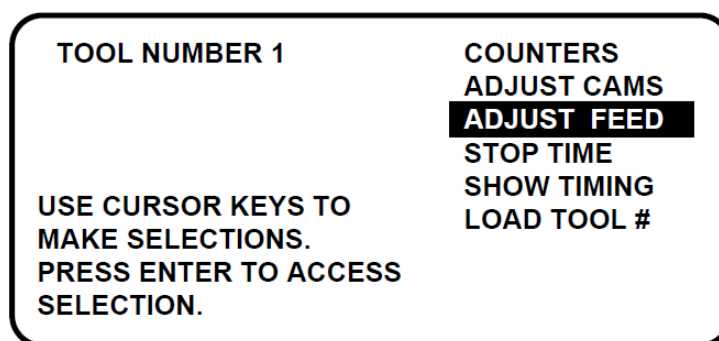


Figure 5-3. Run menu for CPEC and ServoMaster

To adjust feed settings, select “Adjust feed.” Adjust the “Feed length” as indicated.

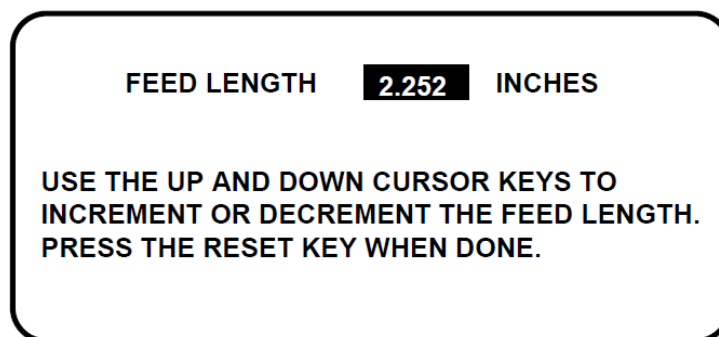


Figure 5-4. Adjusting feed length for CPEC and ServoMaster

Using the up and down cursor keys, you can make minor adjustments. Notice as you press either key, the value changes by .001 inch (1/1000) or less. This information is directly sent to the servo feed and is immediately saved to the currently loaded tool. Be sure to make a note of this change to your feed setup sheet for future reference. Press RESET to exit from this display.

### NOTICE

#### COE BG2 NOT INCLUDED IN THIS CHAPTER

This chapter specifically discusses the Wintriss servo feed interface with the Coe CPEC or ServoMaster feed controller. The COE BG2 feed controller does not support any of the Wintriss controls in the Run mode.



---

# Chapter 6 – Trouble-shooting for Coe SFI

---

This chapter presents any trouble-shooting messages that are generated as a result of the Coe servo feed being interfaced with Wintriss products.

This chapter deals only with the Coe SFI. If you need more assistance in using the Wintriss product, have the actual user manual handy.

## **NOTICE**

### **WINTRISS-GENERATED FAULTS ONLY**

This manual mentions any communications fault conditions that occurs when the Wintriss products lose contact with your Coe servo feed. It does not, however, explain the Coe-generated error messages in any detail. Refer to your servo feed manual for more information.

## **SmartPAC Trouble-shooting**

Whenever SmartPAC and the feed control unit are not successfully communicating, the following message will appear on the LCD. Check that all wiring connections are intact. Refer to Chapter 2 to verify correct installation if necessary. Also refer to Chapter 3, “Position Sensor to view communications” to actually observe the communications link between SmartPAC and the Coe feed controller. Contact Tech Support to assist you in conducting loop back tests and interpreting the screen.

Once communications is restored, you will no longer see this fault message.

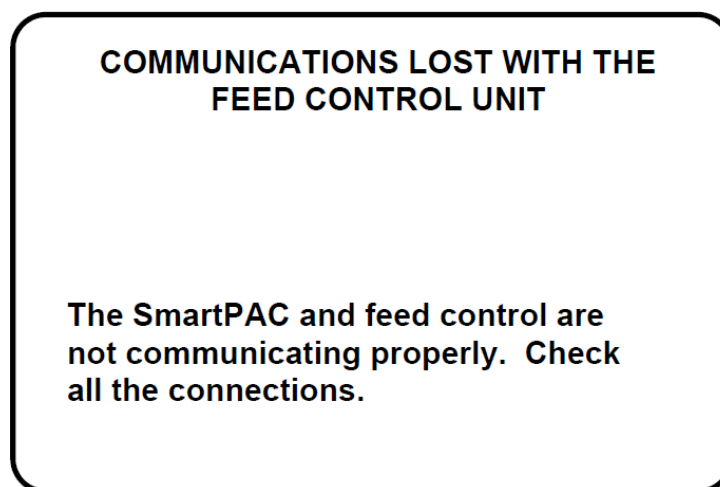


Figure 6-1. Communications fault message

## 1500 series Trouble-shooting

Whenever either ProCam 1500 or DiPro 1500 and the feed control unit are not successfully communicating, the following message will appear on the LCD. Check that all wiring connections are intact. Refer to Chapter 2 if necessary. Once communications is restored, you will no longer see this fault message.

ProCam 1500  
or DiPro  
1500,  
depending  
on which  
1500 unit  
is connected  
to SFI

### **COMMUNICATIONS LOST WITH FEEDER**

**THE PROCAM 1500 AND SERVO FEED CONTROL  
ARE NOT COMMUNICATING. CHECK  
THE CONNECTIONS AND BAUD RATES.**

Figure 6-2. Communications fault message

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# Wintriss Manuals

Wintriss Product	Installation Manual Doc. No.	User Manual/CD Doc. No.
AutoSet (1500, 1500 Plus, 1504, 1504 Plus)	DA71747	DA71447
AutoSetPAC (Tonnage Monitor)	DA71413	DA71443
Die Protection Handbook	N.A. *	1130300 *
DiPro 1500	DA71428	DA71447
DSI 2 Sensor Interface	N.A. *	DA66970 *
LETS Machine Interface (LMI)	N.A. **	DA71974 **
MultiPAC Types 1 and 2	DA71409	DA71443
MultiPAC Types 4 and 5	DA71410	DA71443
ProCam 1500	DA71430	DA71447
ProPAC (Process Monitor – In-die Measurement)	DA71411	DA71443
RamPAC (Shut Height, Counterbalance & Cushion Control)	DA71412	DA71443
Servofeed Interface – Coe/Wintriss	DA71415	DA71443
Servofeed Interface – CWP/Wintriss	DA71416	DA71443
Servofeed Interface – DiPro 1500	DA71429	DA71447
Servofeed Interface – Electrocraft/Wintriss	DA71417	DA71443
Servofeed Interface – Indramat/Wintriss	DA71418	DA71443
Servofeed Interface – ProCam	DA71431	DA71447
Servofeed Interface – SmartPAC	DA71420	DA71443
Servofeed Interface – Waddington/Wintriss	DA71419	DA71443
SFC Machine Interface (SMI)	N.A. **	1140800 **
Shadow V Safety Light Curtain	DA71433	DA71449
Shadow VI Safety Light Curtain	DA71422	DA71445
Shadow VII Safety Light Curtain	N. A. *	1129400 *
Shadow 8 Safety Light Curtain	N. A. *	1139300 *
SmartPAC (w/ DiProPAC & ProCamPAC)	DA71439	DA71454
SmartPAC Hydraulic	DA71435	DA71451
SmartPAC Run Mode (Spanish)	N. A. *	DA71443
SmartPAC w/ WPC II Integration	DA71440	DA71455
SmartPAC 2 (w/ DiProPAC & ProCamPAC)	DA71406	DA71441
SmartPAC 2 Hydraulic	DA71436	DA71451
SmartPAC 2 Servo	DA71437	DA71452
SmartPAC 2 w/ WPC 2000 Integration	DA71407	DA71442
SmartPAC 2 w/WPC 2000 Run Mode (Spanish)	N. A. *	DA71443
WaveFormPAC (Advanced Load Analyzer)	DA71414	DA71443
Wintriss Brake Monitor	DA71432	DA71448
Wintriss Clock Display	N. A. *	DA67206 *
WPC II Wintriss Press Control	DA71438	DA71453
WPC 1000 Wintriss Press Control	DA71423	DA71446
WPC 2000 Wintriss Press Control	DA71421	DA71444
WPC 2000 Option 2	DA71408	DA71442

\* Installation Manual not available; User Manual available in hard copy only. Die Protection Handbook available in hard copy (1102400) and on CD (1130300).

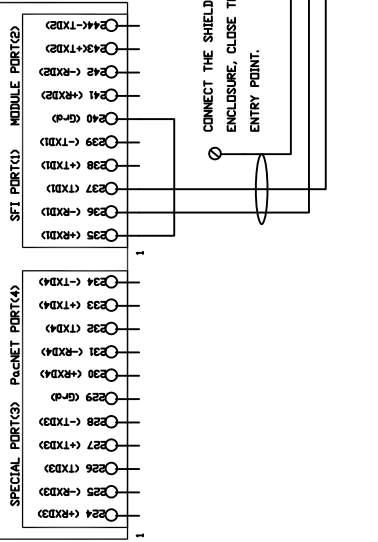
\*\* Installation Manual not available. User Manual available for downloading.



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Wintriss SmartPAC and SmartPAC 2



DRAWN	DATE	WINTRISS CONTROLS GROUP			
CHK.	6/17/10				
		TITLE			
		SmartPAC to Coe BG1 Feed Controller			
		Wiring Diagram			
		SIZE			
		C			
		FIGURE 1			
		REV			
		1			
		SCALE			
		SHEET			
		OF			

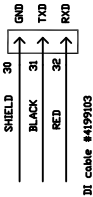


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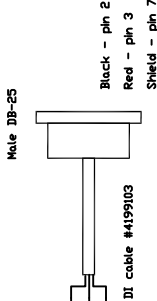
REV		REVISIONS		DATE		APP'D	
DESCRIPTION							

Wintriss SmartPAC and SmartPAC 2

SOMETIMES COE WIRES THE RS-232 PORT TO A TERMINAL BLOCK IN THE CONTROL CABINET. IF THIS IS THE CASE THEN CUT OFF THE DB-25 CONNECTOR ON THE END OF THE DI CABLE AND WIRE IT TO THE TERMINAL BLOCK AS FOLLOWS:



CONNECT THE SHIELD WIRE TO THE ENCLOSURE, CLOSE TO THE CONDUIT ENTRY POINT.

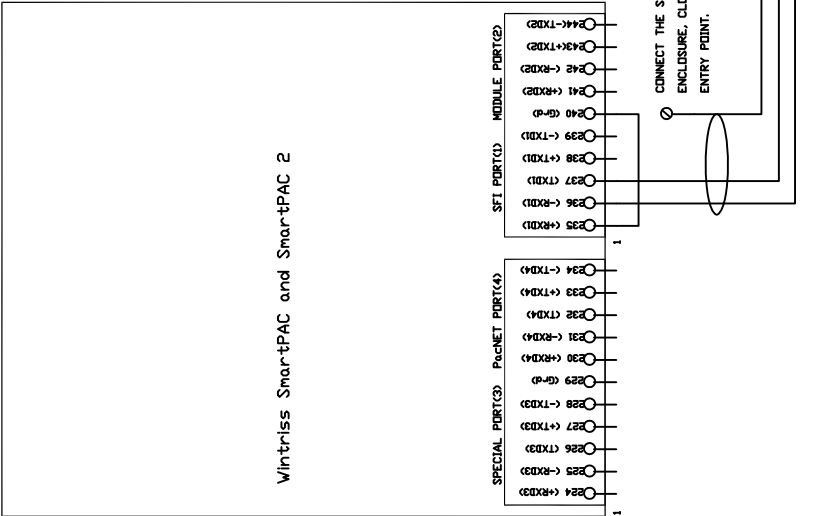


DRAWN		DATE 6/17/10		WINTRISS CONTROLS GROUP					
CHK.		6/17/10							
APPROVALS				TITLE					
				SmartPAC to Coe CPEC Feed Controller					
				Wiring Diagram					
ENG.				CODE IDENT NO.		DRAWING NUMBER		REV	
WFL				C		FIGURE 2			
FLWME									
REL				SCALE		SHEET		OF	



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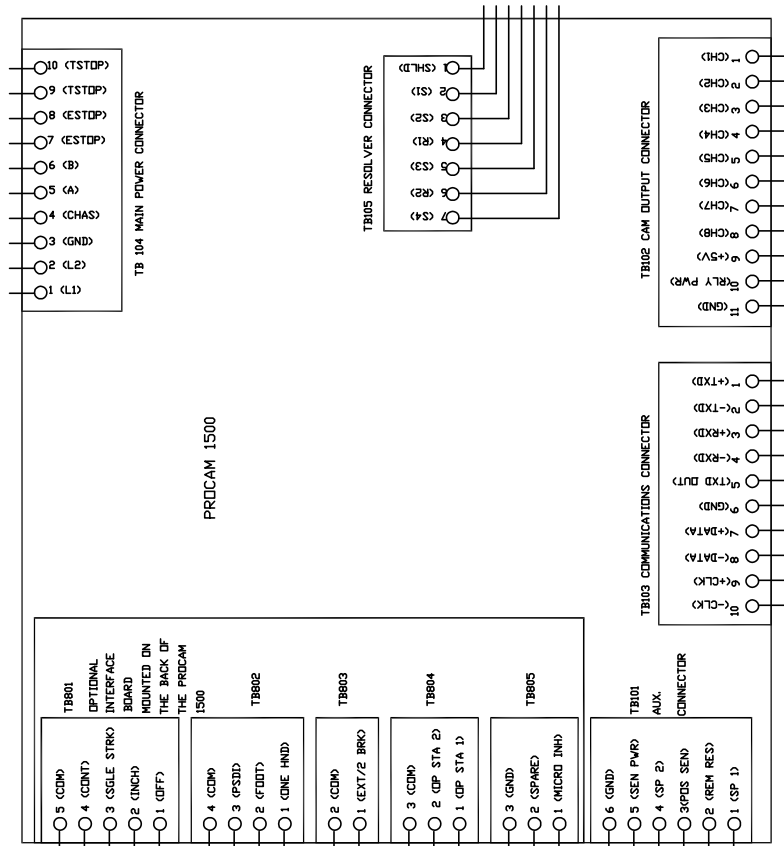
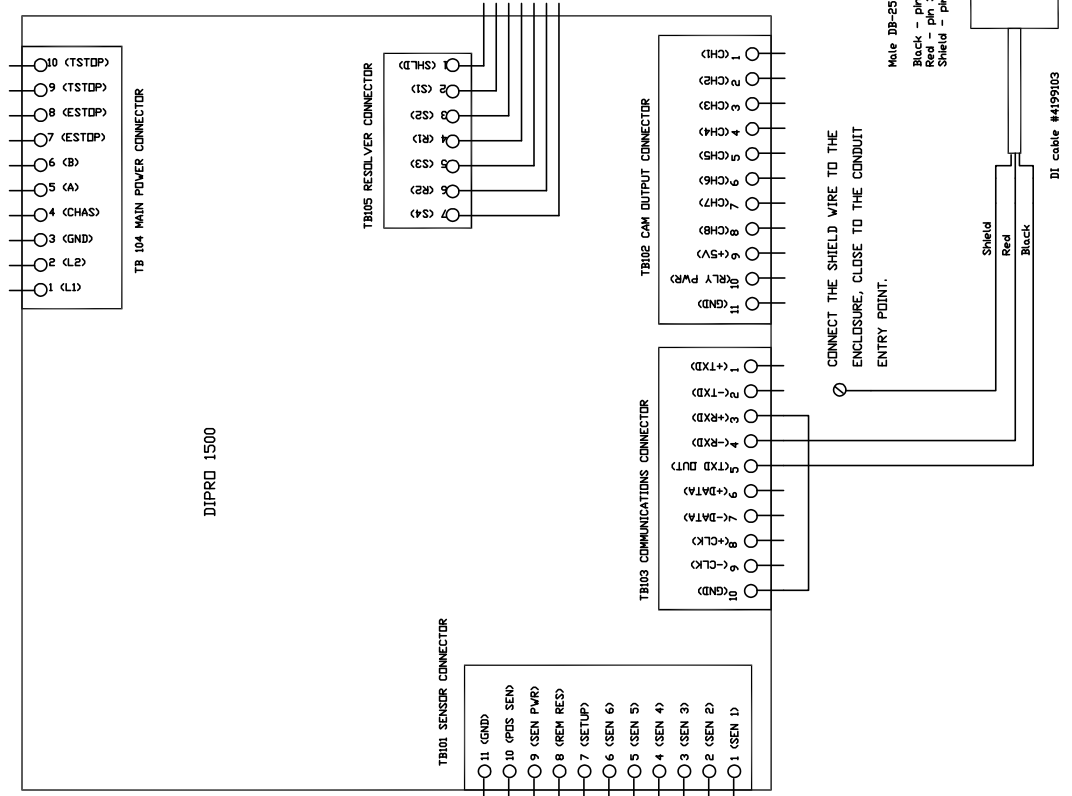
DRAWN	DATE	WINTRISS CONTROLS GROUP		
ADD	6/17/10			
CHK				
APPROVALS		TITLE		
ENG		SmartPAC to Coe BG2 Feed Controller		
WFG		Wiring Diagram		
FLWME		CODE IDENT NO.	SIZE	DRAWING NUMBER
REL			C	FIGURE 3
		SCALE	SHEET	
			DF	





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DESCRIPTION							

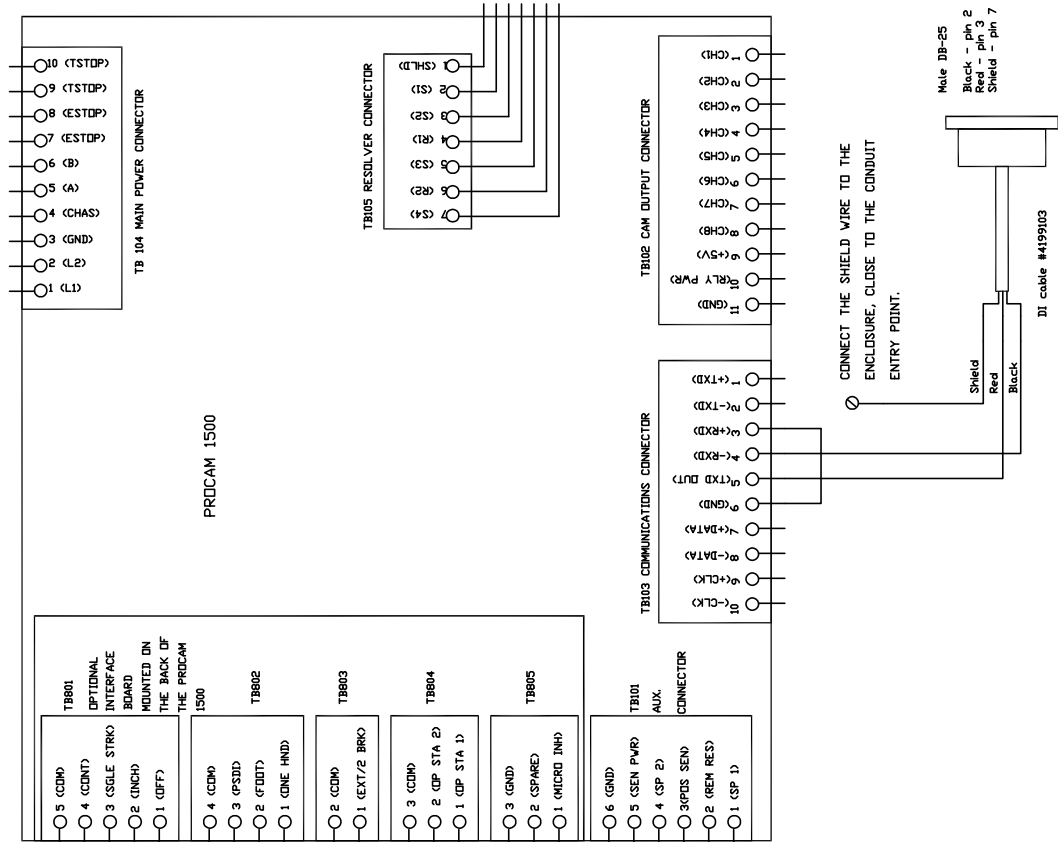
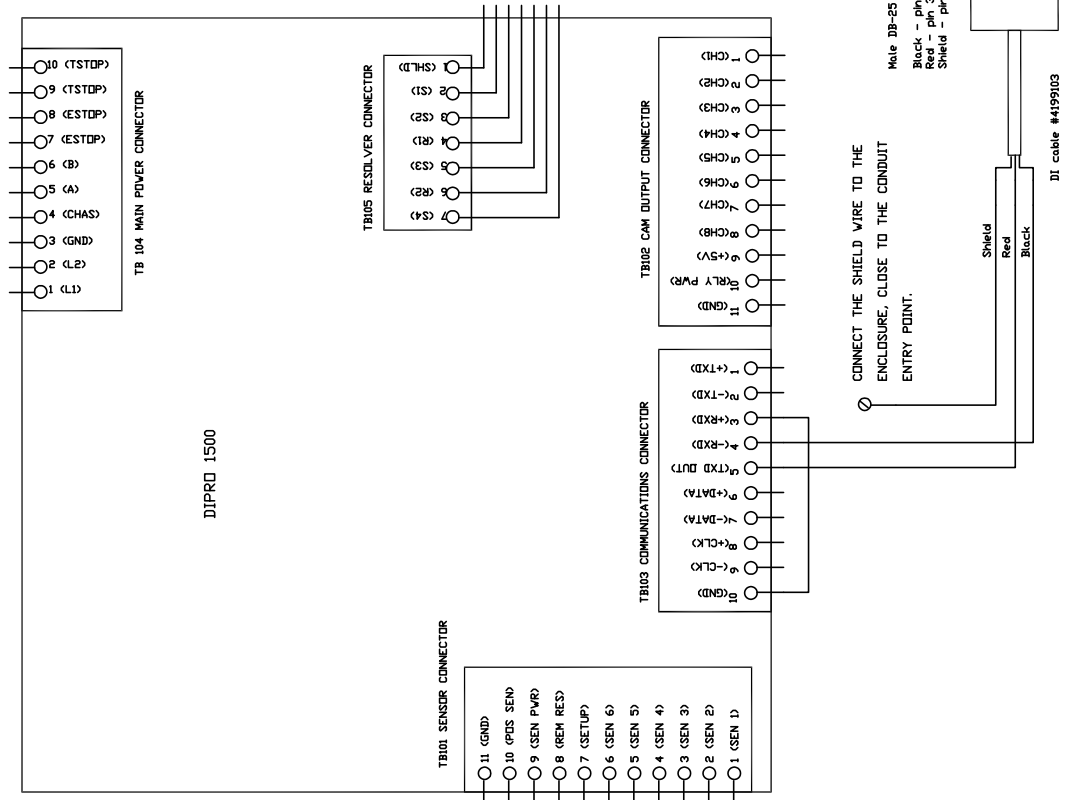


DRAWN		ADB	DATE 7/20/10	WINTRISS CONTROLS GROUP			
CHK.							
APPROVALS				TITLE			
ENG.				1500 FAMILY Coe BGI Feed Controller			
MFG.				Wiring Diagram			
FILNAME				CODE IDENT NO.	SIZE C	DRAWING NUMBER FIGURE 4	REV
REL				SCALE		SHEET	OF



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		DESCRIPTION					

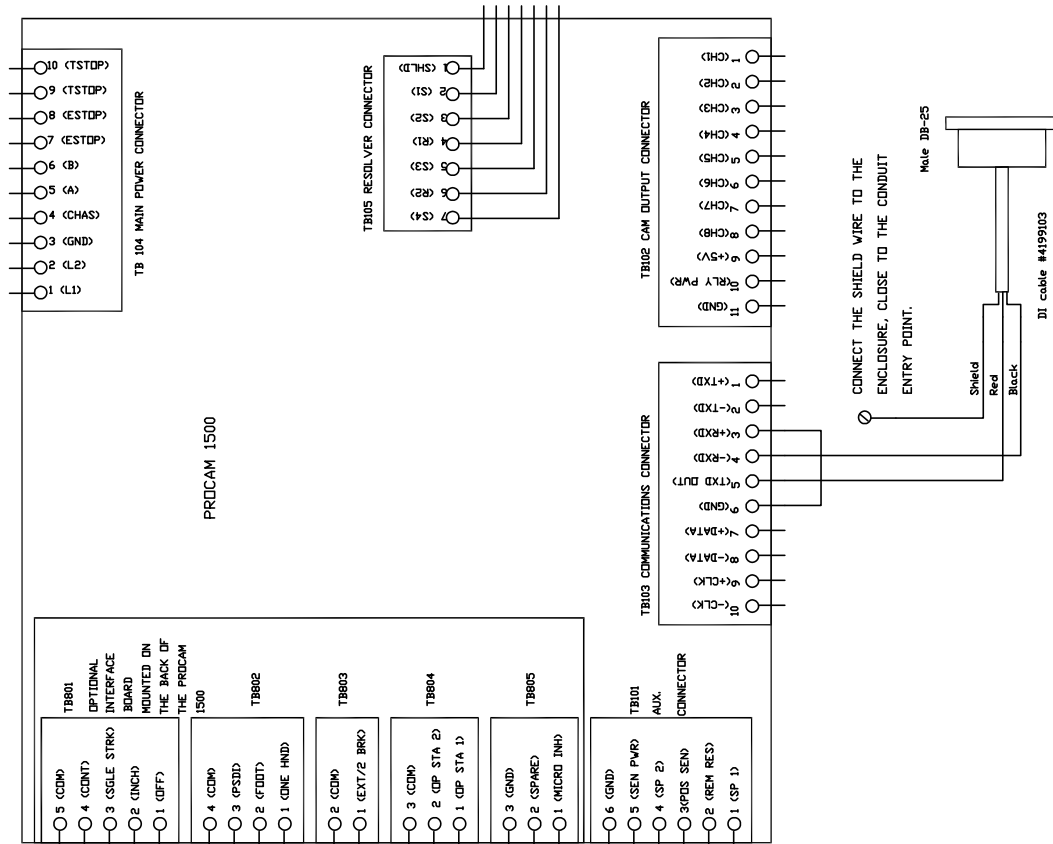
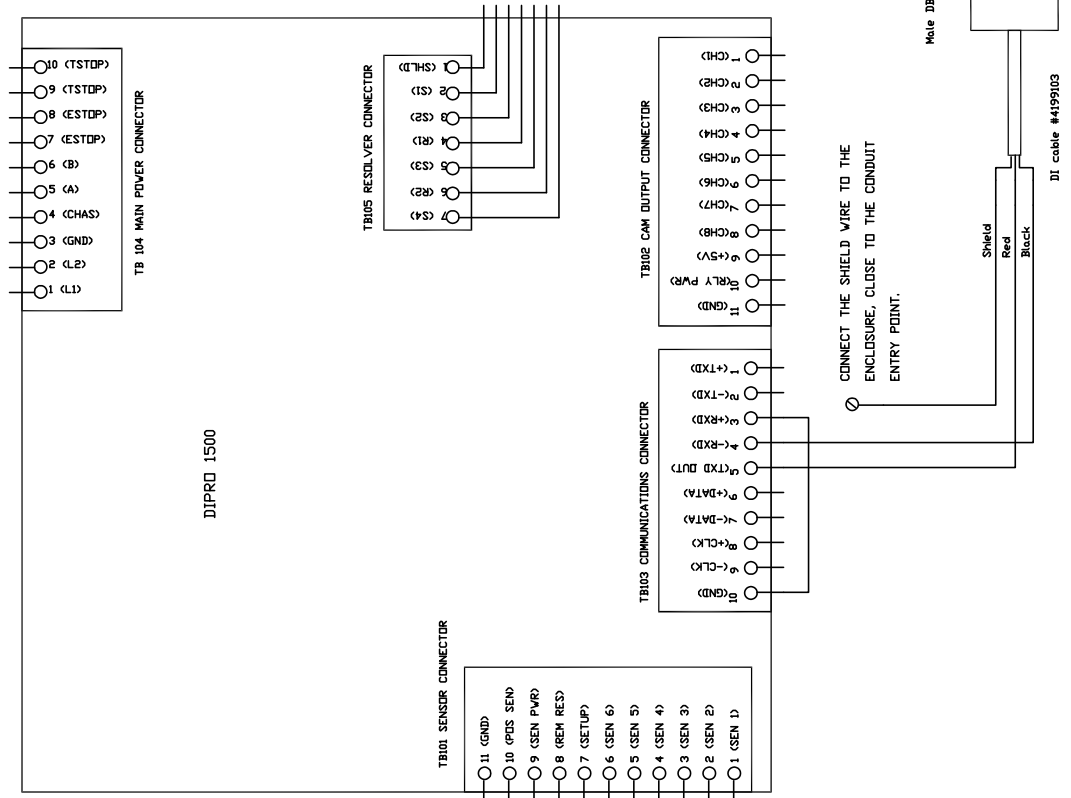


DRAWN		DATE	WINTRISS CONTROLS GROUP			
ADB		7/20/10				
CHK.			APPROVALS		TITLE	
			ENG.		1500 FAMILY Coe CPEC Feed Controller?	
			MFG.		Wiring Diagram	
FILENAME			CODE IDENT NO.	SIZE	DRAWING NUMBER	REV
				C	FIGURE 5	
REL			SCALE	SHEET		OF



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DESCRIPTION							

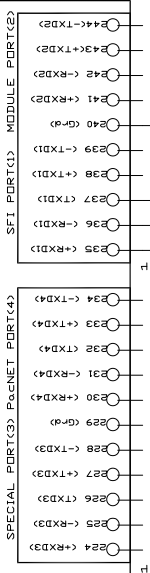


DRAWN		ADB	DATE	WINTRISS CONTROLS GROUP		
CHK.			7/20/10			
APPROVALS				TITLE		
ENG.				1500 FAMILY Coe BG2 Feed Controller		
MFG.				Wiring Diagram		
FILNAME				CODE IDENT NO.	SIZE	DRAWING NUMBER
				C		FIGURE 6
REL				SCALE	SHEET	DF



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Wintriss SmartPAC and SmartPAC 2



MALE RJ12 CONNECTOR

PLUG THIS CONNECTOR  
INTO THE PROGRAMMING  
PORT (PGM PORT) ON THE  
BACK OF THE RED LION  
HMI UNIT.

25 FOOT CABLE IS PROVIDED BY COE PART #140597647

TERMINATE SHIELD TO  
ENCLOSURE NEXT TO  
CONDUIT ENTRY POINT.

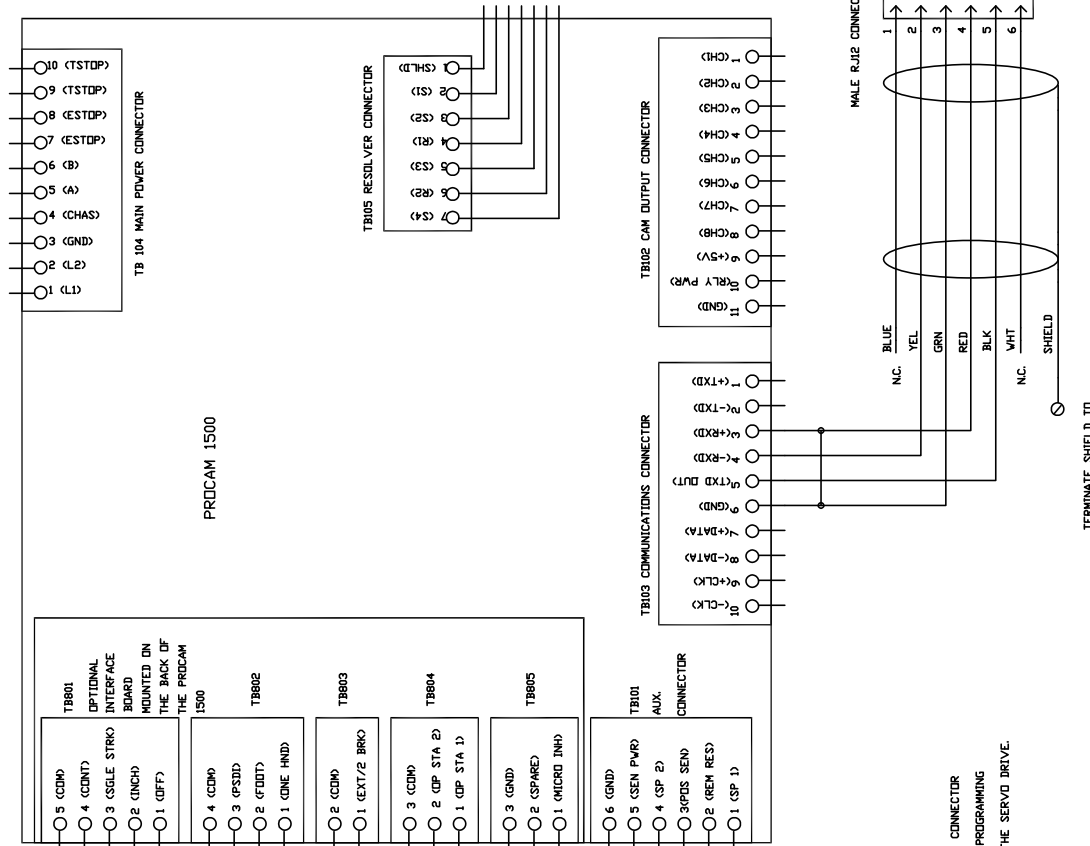
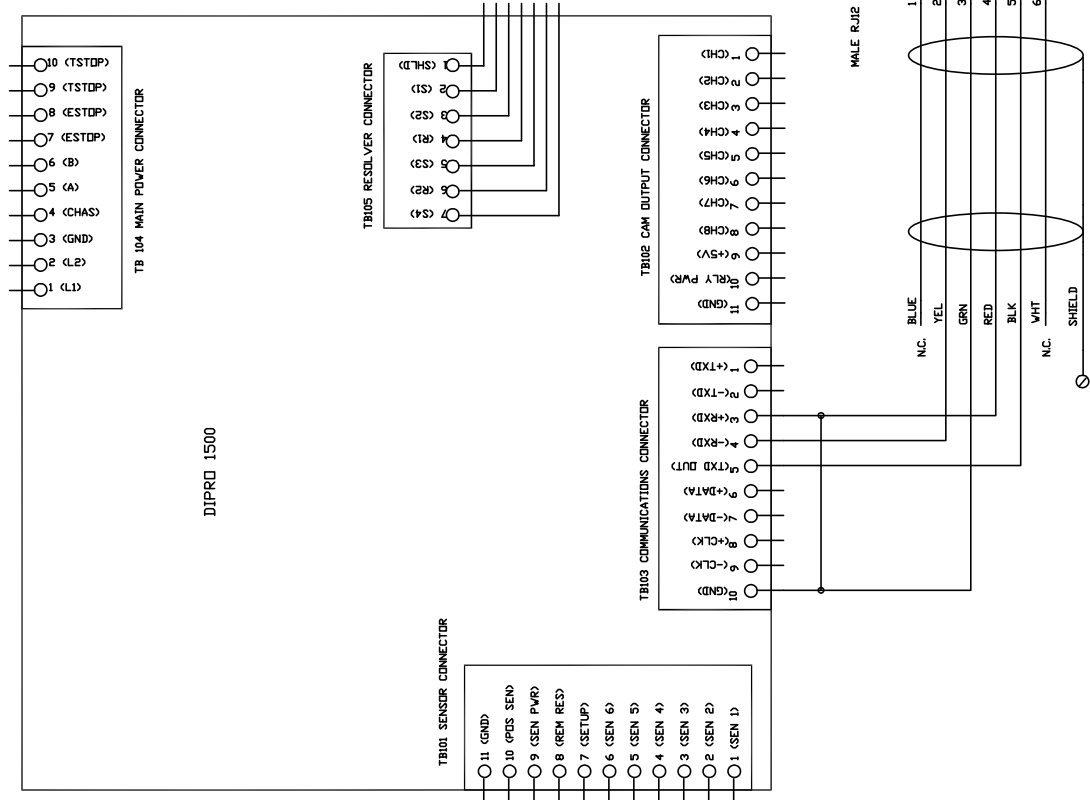
DRAWN	ADB	DATE	7/14/15
CHK.			
APPROVALS			
ENG.			
MFG.			
FILENAME			
REL			
WINTRISS CONTROLS GROUP			
TITLE			
SmartPAC to Coe SERVO-MASTER Feed Controller Wiring Diagram			
CODE IDENT NO.	SIZE	DRAWING NUMBER	REV
	C	FIGURE 7	
SCALE		SHEET	OF





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		DESCRIPTION					



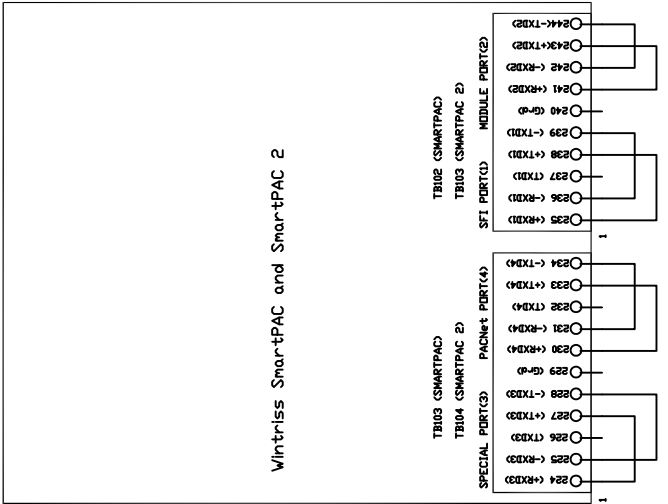
DRAWN		DATE		TITLE	
CHK.		ADB		WINTRISS CONTROLS GROUP	
ENG.		APPROVALS		1500 FAMILY Coe Servo Master Feed Control	
MFG.				Wiring Diagram	
FILNAME				CODE IDENT NO.	
REL				SIZE	
				C	
				DRAWING NUMBER	
				FIGURE 8	
				REV	
				SCALE	
				SHEET	
				DF	



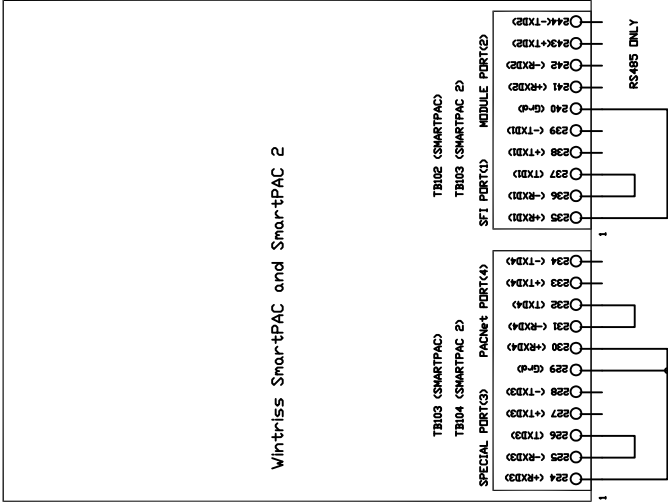
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APPD		

RS 485 CONNECTIONS



RS 232 CONNECTIONS



DRAWN	ADD	DATE	HONEYWELL		
CHK		6/17/10	WINTRISS CONTROLS GROUP		
APPROVALS			TITLE		
ENCL			SMARTPAC LOOPBACK WIRING CONNECTIONS		
WFL			CODE IDENT NO		
FLWME			DRAWING NUMBER		
REL			SIZE		
			C		
			FIGURE 9		
			REV		
			SCALE		
			SHEET		
			DF		

