

FedEx Ground SWAK IV Tech Tips

Number: FDX 04 - 03

Date: June 3, 2003

Subject: Replacing An 8140 With a Panther Indicator

This bulletin will provide the necessary instructions for replacing an 8140 Indicator with a Panther PTHN1000-000.

First remove the 8140 Indicator. The load cell cable and data cables can be used on the Panther indicator. Mount the Panther in a suitable location where it will be visible and not interfere with scale operation.

To access the Controller PCB for internal wiring and switch settings:

1. Separate the front panel from the enclosure by inserting the tip of a flat blade screwdriver into one of the two on the bottom of the front panel assembly. (Ref. A in figure 1)

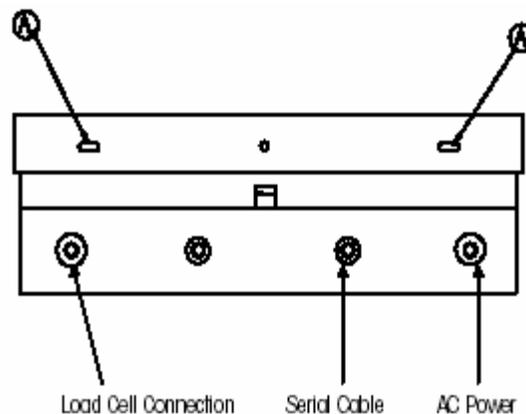


Figure 1.

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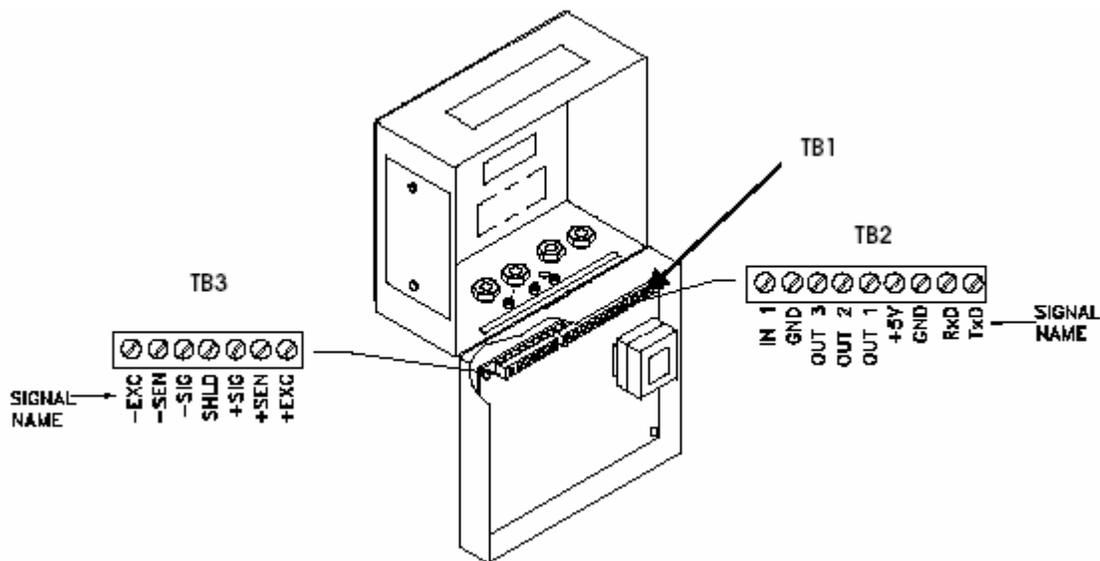
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2. Gently push in toward the enclosure. You should hear a quite "pop" when the cover has been released.
3. Push in on the side of the slot closest to the bottom of the cover. Repeat for other slot.
4. Lift the bottom of the front panel out until it completely clears the enclosure.
5. Squeeze the top of the front panel to the enclosure slightly and raise it to clear the top two clips. The cover will swing down, hinged by a wire cable at the bottom.



To connect the unit:

1. Pass the cables that enter the enclosure through an appropriate size cable grip before connecting the wires.
2. Tighten the cable grip sufficiently to provide a water-tight seal around the cable only after re-securing the back-cover. This will allow any internal cable slack to be received through the cable grip.

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The Harsh Environment terminal is shipped with the power cord already installed at the factory. Before applying power, confirm that the power cord is wired properly for the AC voltage where the terminal will be used. The power cord connects to the TB1 terminal strip on the Controller PCB. (Ref. Figure 2)



Figure 2.

Analog Load Cell Connections:

Load cell connections are made to TB3 on the Controller PCB. The pin-out for TB3 is labeled on the bottom of the controller. The following diagrams describe TB3 wiring for standard 6 wire and 4 wire load cells.

PANTHER TB3 Standard 6-wire Cable

-EXC	7	Blue
-SEN	6	Red
-SIG	5	Black
Shield	4	Orange
+SIG	3	Green
+SEN	2	Yellow
+EXC	1	White

PANTHER TB3 4-wire Cable

-EXC	7	Black
-SEN	6	Red*
-SIG	5	Yellow or Orange
Shield	4	White*
+SIG	3	Green
+SEN	2	
+EXC	1	

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Controller PCB Serial Port Connections:

The following diagram and wiring code describes connecting the Panther to the SWAK IV Controller.

PANTHER TB2 COM1		
1	TXD	RS-232 Transmit
2	RXD	RS-232 Receive
3	GND	Signal Ground

Keystation A

3 TXD Red to Panther RXD
3 RXD Black to Panther TXD
3 GND Clear to Panther Ground
3 SHIELD

Keystation B

13 TXD Red to Panther RXD
13 RXD Black to Panther TXD
13 GND Clear to Panther Ground
13 SHIELD

Controller PCB Switch and Jumper Settings:

Refer to Figure 2-4 for proper switch and jumper settings.

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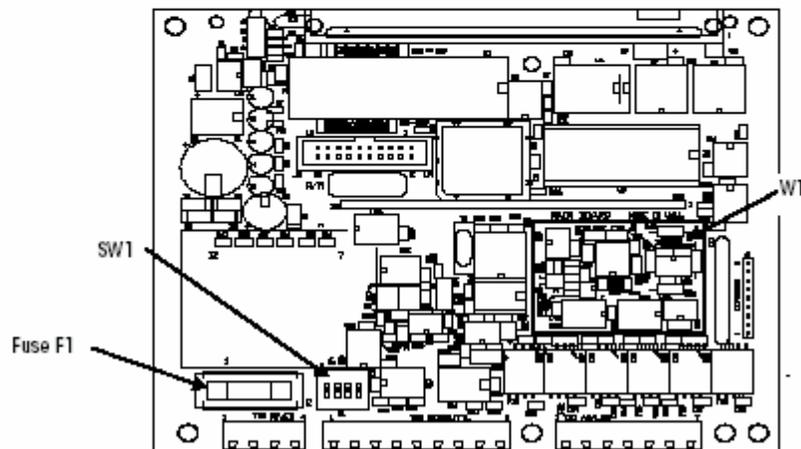
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SW1 Switch Settings

- 1 Setup/Calibration Enable = On
Normal Operation = Off
- 2 Display Comma Tail = On
- 3 Not Used (Should be Off)
- 4 Test Mode (Must be Off)

Jumper W1 (Analog Version)

- Installed = 2 mV/V Load Cells
Not Installed = 3 mV/V Load Cells



Main PCB Analog Versions (P/N *14865400A or *14865200A) (P/N #15201300A or #15201500A)

Figure 2-4

Programming and Configuration:

Setup switch 1-1 must be closed to enter Setup. Press ZERO and PRINT simultaneously and the [F1] prompt will be displayed.

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Once the [F1] prompt is displayed:

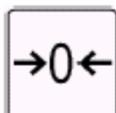
- The SELECT key will skip to the next block.



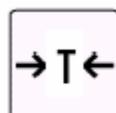
- The PRINT key will enter the block.



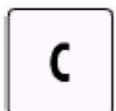
The following keys are used to configure the program blocks.



ZERO Backup to the previous step.



TARE Moves the blinking edit cursor left one digit.



CLEAR resets a numeric data entry value to zero and/or allows programmer to skip to the end of setup.



MEMORY moves the blinking edit cursor right one digit.



SELECT increments the numeric data entry digit and/or allows the programmer to view the next in a selection list.



PRINT (ENTER) Accepts/terminates a data entry.

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At the [F1] prompt, press the SELECT key until the [F6] Diagnostics block is displayed. Press the PRINT key until [F6.5 0] is displayed. (Reset To Factory Default). Press the SELECT key and change the 0 to a 1. Press PRINT. At the [Load 0] prompt, press the SELECT key to change the prompt from 0 to 1. All soft switches are now set to the factory default settings.

At the [F7] prompt, press the SELECT key until [F1] is displayed. Press the PRINT key. At the [F1.2 x] prompt, press the SELECT key until 1 is displayed. Press the PRINT key. The display will advance to [F1.3] momentarily, then display [xxxxx]. Using the Tare, Memory, and Select Keys, enter 200 for scale capacity. At the [F1.4] prompt, press the SELECT key until 0.1 is displayed. Press the PRINT key.

At the [CAL 0] prompt, press the SELECT key to change the 0 to 1, then press the PRINT key. At the [E SCL] prompt, make sure the scale is empty and then press the PRINT key. The scale will display [15 CAL] and start counting down. The display will now read [Add Ld]. Place the test weight(s) on the scale and then press the PRINT key. The display will now change to ['0'0000]. Using the TARE, MEMORY, and SELECT keys, enter the value of the test weights on the scale. No decimal point is permitted. The display will change to [15 CAL] and count down. The display will go to [CAL d] momentarily and then display [F1.6 0]. Press the PRINT key until [F2] is displayed.

At the [F2] prompt, press the PRINT key. At [F2.1 x] make sure it is set for 0. If not, press the SELECT key until 0 is displayed, then press the PRINT key. Press the PRINT key until [F2.3.1 x] is displayed. Press the SELECT key until x is 0, then press the PRINT key. Press the PRINT button until [F2.4.4 x] is displayed. Press the SELECT key until x is set to 0, then press the PRINT key. Press the PRINT key until [F3] is displayed.

At the [F3] prompt, press the PRINT key. At the [F3.1.1 xxxx] prompt, press the SELECT key until 4800 is displayed, then press the PRINT key. At the [F3.1.4 x] prompt, press the SELECT key until x is set to 2, then press the PRINT key. At the [F3.1.5 x] prompt, press the SELECT key until x is set to 1, then press the PRINT key. At the [F3.1.6 x] prompt, press the SELECT key until x is set to 1. Press the PRINT key. [F3.2 x] is displayed. Press the SELECT key until x is set to 0, then press the PRINT key. Press the PRINT key until [F4] is displayed, then press the CLEAR key.

When the display is [CALOFF], then press the PRINT key. To disable access to the setup mode, turn switch SW1-1 Off.

The SWAK Controller settings for scale type should now be PTHN or if that is not a selection, use 8140.

End of Procedure

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