

Install Pedestal Receipt Printer (FMPlus/FMLive)

These procedures assume the Pedestal Receipt Printer is being added to an existing Fuel Management Unit (FMU) without a receipt printer. Holes are drilled in the FMU pedestal door according to <u>Figure 1</u> to receive the receipt printer.



Figure 1 Locating Mount Holes and Tie Wrap Mounts

Parts Required

Ë	Part #	Part Description	Amount
ntec	972A0500	Pedestal Receipt Printer	1
Syı	102377	Strain Relief	1
Lo T	211052	¼-20x0.75 Mount Screws	4
Ē	193453*	Flat Washers	4
er	220973	Adhesive Tie Wrap Mount	2
Ns(235849	Hex Key, 3/16 inch	1
E O	N/A	6-inch Miniature Tie Wrap	2
Ē	n/A	16-14AWG #6 Hole Ring Terminal	2

Perform the following:

WARNING Electrical shock hazard. Connections will be made to power wires exiting the conduit. Ensure power is removed by turning off the FMU circuit breaker at the AC power source.

- 1. Turn off FMU power at the breaker panel.
- 2. Unlock and open the FMU pedestal door.
- 3. Loosen the four mount screws and remove the surge panel. The surge panel may remain attached to and hang from the connected three wire harnesses.
- 4. Loosen the four mount screws, and remove the pedestal upper electrical access panel.

NOTE The FMU pedestal door may be removed to measure and drill/punch the required holes. There are nine attached nuts and washers.

- 5. Locate, mark, and drill/punch the four 9/32-inch mount holes, the 3/8-inch hex wrench access hole, and the 1-5/16 cable entry hole (Figure 1).
- 6. Remove burrs and rough edges from the new holes.
- 7. Position one adhesive tie wrap over the bottom tie-wrap mount.
 - a. Insert a miniature tie wrap through the adhesive tie-wrap mount, and pull tight enough to hold/store the 3/16 hex wrench.
 - b. Cut excess from the tie wrap.
 - c. Insert the hex key into the circle formed by the tie wrap.
- 8. Remove the four $\frac{1}{4}$ -20x0.75 mount screws and washers from the back of the receipt printer.
- 9. Thread the AC power cable and printer communications cable through the 1-5/16 inch thru-hole.
- 10. Locate the receipt printer over the mount holes, and reinstall the four $\frac{1}{2}$ -20x0.75 mount screws and washers.

- 11. Leave some slack in the cables, and secure the AC power and printer communications cables to one adhesive tie-wrap mount with a 6-inch miniature tie wrap.
- 12. Install the strain relief in a 1/2-inch knockout hole in the bottom of the FMU pedestal electrical access panel.

NOTE For ease of maintenance, install with the compression fitting at the top and the locknut at the bottom.

- 13. Unthread the compression fitting from the strain relief, and remove the rubber bushing.
- 14. Route the AC power cable and printer communications cable up through the strain relief, rubber bushing, and compression cap.
- 15. Leave enough slack in the cables to permit the FMU pedestal door to be opened fully, and reassemble the strain relief.
- 16. Unlock and open the FMU upper cabinet door.
- 17. Route the printer communications cable up through the bulkhead hole.
 - a. For FMPlus hardware, connect the communications cable to J2 RECEIPT PRINTER on the Satellite I/O Control Board . The receptacle is keyed to only accept the connector one way (Figure 2).





b. For FM*Live* hardware, connect the communications cable to the USB to Serial connector on the EAPro (Figure 3).



Figure 3. Connect Communications Cable - FMLive

- 18. Attach the green ground wire to the ground lug in the bottom of the FMU pedestal electrical enclosure.
- 19. Crimp 16-14AWG, #6-hole ring terminals on the end of the receipt printer AC power cable black and white wires.
- 20.Remove the locknut, washer, and alignment ring from the FMU power ON switch (<u>Figure 4</u>).



Figure 4 Pedestal Receipt Printer Wire Connections

21. Push the ON switch out of the mount hole.

- 22. Ensure the existing wire remains installed, and attach the ring terminal of the receipt printer AC power cable black (hot) wire to the switched hot terminal of the ON switch.
- 23. Ensure the existing wire remains installed, and attach the ring terminal of the receipt printer AC power cable white (neutral) wire to the switched neutral terminal of the ON switch.
- 24. Orient the notch facing down, and reinsert the barrel of the ON switch in the FMU mount hole.
- 25. Reinstall the alignment ring, washer, and locknut on the barrel of the ON switch. A key in the alignment ring should insert into the notch in the ON switch, and the locating pin in the alignment ring should insert into the locating hole next to the FMU mount hole. The alignment ring is designed to keep the ON switch orientation notch facing down.
- 26. Reinstall the FMU pedestal surge panel and upper electrical access panel.

Installation is complete.

Configure a Receipt Printer for FMPlus Unit

The FMU must be programmed to enable the receipt printer.

- *NOTE* Programming may be accomplished either by calling Syntech's CSC or with a laptop connection in accordance with Product Bulletin 111. The FMU must allow connection by the CSC for remote programming.
 - 1. Type '**5B**' command to access the CURRENT RECEIPT PRINTER CONFIGURATION screen (Figure 5).

TES>5b

Entering Configuration Mode!

CURRENT RECEIPT PRINTER CONFIGURATION

RECEIPT PRINTER		ENABLED
RCPTS PRINT ON PWR UP	:	DISABLED
RECEIPT ALWAYS	:	DISABLED
RECEIPT PRINTER TYPE	÷	PEDESTAL
PEDESTAL RCPT PAPER CUT	1	FULL
RECEIPT PRINTER BAUDRATE	:	2400
PRINT DOLLAR FOR PROKEE RECEIPTS	:	DISABLED
PRINT DUPLICATE RECEIPTS	:	DISABLED
PRINT RECEIPT DATE/TIME STAMP	1	ENABLED
PRINT MASTER PRODUCT DESCRIPTION	:	DISABLED
PRINT RECEIPTS FOR AIM	:	DISABLED
PROMPT FOR AIM RECEIPTS	:	DISABLED
ALLOW \$0.00 FOR PROKEE PRICING		ENABLED
RESTORE DEFAULT VALUES		
	RECEIPT PRINTER RCPTS PRINT ON PWR UP RECEIPT ALWAYS RECEIPT PRINTER TYPE PEDESTAL RCPT PAPER CUT RECEIPT PRINTER BAUDRATE PRINT DOLLAR FOR PROKEE RECEIPTS PRINT DUPLICATE RECEIPTS PRINT RECEIPT DATE/TIME STAMP PRINT MASTER PRODUCT DESCRIPTION PRINT RECEIPTS FOR AIM PROMPT FOR AIM RECEIPTS ALLOW \$0.00 FOR PROKEE PRICING RESTORE DEFAULT VALUES	RECEIPT PRINTER : RCPTS PRINT ON PWR UP : RECEIPT ALWAYS : RECEIPT PRINTER TYPE : PEDESTAL RCPT PAPER CUT : RECEIPT PRINTER BAUDRATE : PRINT DOLLAR FOR PROKEE RECEIPTS : PRINT DUPLICATE RECEIPTS : PRINT RECEIPT DATE/TIME STAMP : PRINT MASTER PRODUCT DESCRIPTION : PRINT RECEIPTS FOR AIM : PRINT RECEIPTS FOR AIM : PROMPT FOR AIM RECEIPTS : ALLOW \$0.00 FOR PROKEE PRICING : RESTORE DEFAULT VALUES

USAGE - <LETTER>=CHANGE VALUE, <ESC>=EXIT_

Figure 5. Configure Receipt Printer with 5B Command

2. Type the letter of the option to be changed. As a minimum, the following options must be set:

Option	Description	Setting
А	Receipt Printer	ENABLED
D	Receipt Printer Type	PEDESTAL
E	Pedestal Receipt Paper Cut	FULL
F	Receipt Printer Baudrate	2400

- 3. Press '**Y'** to save the configuration changes if any changes were made. The prompt: "SAVING SYSTEM CONFIGURATION... CONFIGURATION RECORDED," will appear.
- 4. Run a test transaction. The front panel will ask you if you would like a printed receipt.
- 5. Press Enter for Yes.
- 6. Verify the receipt prints with the desired information.

NOTE If the receipt printer does not function as desired, contact Syntech's CSC.

Configure the Receipt Printer in FMLive

Assumptions:

This tutorial assumes:

- You must be an Application Manager.
- You have navigated to Administration > Unit Workflows screen.
- You are editing an existing Unit Workflow.
- 1. Select the **Unit Workflow** you would like to edit (Figure 6).

nit Workflows	Operator Prokee Fueling - need Rec	eipt 2 >
quipment ProxCard Only (Gate Access)	Default Workflow?	3 Edit Workflow
AIM with OP	No Operator Prokee	Delete Workflow
OP Only	initiator step • For Authonization	
ProxUserWithVehicle	Unit authorizes transaction.	
Legacy Prokee Upgrade only DEFAULT		
Test Workflow 2 DEFAULT		
(United Rentals) Equipment Information Only		
Equipment Fleet Card Only		
WEX Local Auth	_	
Operator Prox DEFAULT		
Operator ProxCard Only (Gate Access)		
test	_	
Pepsi MidAmerica		
Operator Prokee Fueling - need Receipt	1	

Figure 6. Unit Workflow Screen

- 2. Select the Unit Workflow dropdown arrow.
- 3. Select Edit Workflow. The Unit Workflow modal will open.

4. Select Add Step (Figure 7).

Operator Prokee Fueling - need Receipt		
ATTENTION: Improperly configur Syntech support before changing for more information.	ing a unit workflow can disrupt fueling authorization. Please consult Authorization Media or Verification Types. Also, read <u>this help article</u>	
Name *	Operator Prokee Fueling - need Receipt	
Step # 1 (Initiator)		
Authorization Media *	Operator Prokee 🔹	
Verification Type *	Authorize 🔹	
Add Step 4		
	Cancel Save	

Figure 7. Edit Unit Workflow

5. Select Authorization Media > Print Receipt (Figure 8).

Operator Prokee Fueling - need Receipt		
ATTENTION: Improperly configur Syntech support before changing for more information.	ing a unit workflow can disrupt fueling authorization. Please consult g Authorization Media or Verification Types. Also, read <u>this help article</u>	
Name *	Operator Prokee Fueling - need Receipt	
Step # 1 (Initiator)		
Authorization Media *	Operator Prokee 👻	
Verification Type *	Authorize 👻	
Step # 2		
Authorization Media *	Print Receipt 5	
Verification Type *	Equipment Prox Card	
Prompt Line 1 *	Odometer Keypad Operator ID Keypad	
	Operator Prokee	
Add Step	Operator Prox Card	
6	Print Receipt	
	Cancel Save	

Figure 8. Select Print Receipt - Unit Workflow

NOTE The user may change the Prompt in the "Prompt Line 1" field. If not, the default will be used.

6. Select Save.

	If any questions arise, contact Syntech Systems, Inc.'s Customer Satisfaction Center (CSC) at		
TIP	1-800-888-9136, ext. 2, or email support@myfuelmaster.com.		

Change Log

Date	Description
6/14/2022	Added FM <i>Live</i> Hardware mounting steps for Receipt Printer Board that uses a USB Connection.
	Added FMLive configuration steps to enable Printer Receipt in a workflow.