TF30 Tray Feeder Installation Instructions



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OVERVIEW

Purpose

These instructions describe how to install the TF30 Tray Feeder on PP100, PS200, PS300 and PS288FC systems.

Tools Required

- Allen Key sets SAE (inch) and metric
- Small wire cutter
- Wire crimper
- Small (3 inch) flat blade screwdriver
- · Small crosshead screwdriver
- Small level
- Open end wrench set (sizes 5/16 inch to 5/8 inch)
- TF Simulator

Software Required

AH400 Version 5.0 or higher (supplied in kit)

Description

The TF30 Tray Feeder is universal and will accept a variety of tray sizes per specifications.

To use the TF30 Tray Feeder, the AH400 handler software must be at Version 5.0 or higher, along with its corresponding WinAH400.ini file entries.

Tube Feeders cannot be used if two TF30 Tray Feeders are installed, or if a TF30 Tray Feeder is installed in Position #1 (see *Figure 1-1*). Tube Feeder vibratory motors must be removed from the system.

Configurations

There are three positions on the base plate:

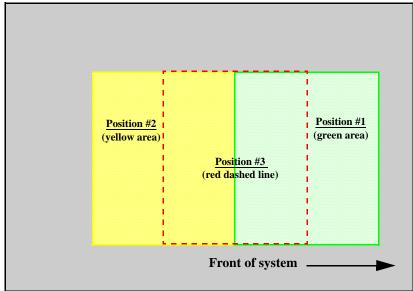


Figure 1-1—Positions on base plate

For PS288FC systems, there is one configuration:

]	Position #1	Position #2	Position #3	Programmer
	Static tray artial access)	TF30 Tray Feeder	1	Quad

Figure 1-2—PS288FC configuration

For PP100, PS200, or PS300 systems, there are five configurations:

Position #1	Position #2	Position #3	Programmer	
TF30 Tray Feeder	TF30 Tray Feeder	-	Dual Inline	
TF30 Tray Feeder	Static tray (full access)	-	Dual Inline	
Static tray (full access)	TF30 Tray Feeder	-	Dual Inline	
Static tray (partial access)	-	TF30 Tray Feeder	Quad	
Static tray - (partial access)		TF30 Tray Feeder	Dual Inline	

Figure 1-3—PP100, PS200, PS300 configurations

PP100, **PS200**, **PS300** Systems

This section describes how to install the TF30 Tray Feeder on a PP100, PS200, or PS300 system. Photos show a PS300 system. Your system may be slightly different.

NOTE: For information on installing the TF30 Tray Feeder on a PS288FC system, see "PS288FC Systems" on page 25.

1. Prepare the System

- 1a) Turn off the main power and disconnect the electric power cord coming into the system.
- 1b) Turn off the air supply and disconnect the air hose coming into the system.
- 1c) Remove all media, devices and adapters from the work envelope.

2. Remove Lower Left Door

New system door hinges look like this:



Figure 1-4—New system door hinge

Older system door hinges look like this:



Figure 1-5—Older system door hinge

- 2a) For new systems: Lift the lower left door off its hinges. Do not remove hinges from the frame.
- 2b) For older systems: Remove the lower left side door from the frame. Remove the hinges from the frame.

NOTE: The lower left door is not re-used with the TF30 Tray Feeder.

3. Remove Left Back Panel

3a) On the back of the system, remove the screws securing the left back panel.



Figure 1-6—Remove back panel (shown with Option Bay)

3b) Remove the back panel. Set it aside. It will be re-installed at Step 21a.

4. Remove All Static Tray Platforms

Systems have one or two tray static tray platforms. Remove all existing static tray platforms. They are not compatible with the TF30 Tray Feeder. A new static tray platform is supplied in the kit.

4a) Remove the fiber optic cables from the static tray platforms using a 0.05 inch hex wrench to loosen the small set screw on the top of the tray platforms.

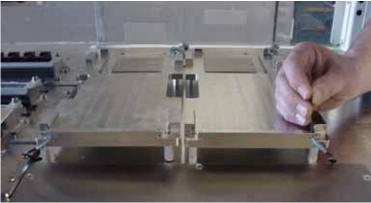
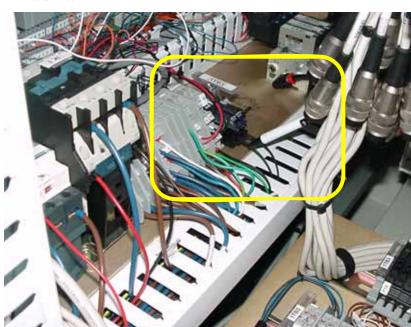


Figure 1-7—Loosen set screw to remove fiber optic cables



4b) Follow the fiber optic cables back to the fiber optic amplifiers. See *Figure 1-8*.

Figure 1-8—Locate fiber optic amplifiers

- 4c) Unscrew and remove the old fiber optic cables. The old fiber optic cables are not re-used.
- 4d) Connect the new fiber optic cables (supplied in kit) to the amplifiers labeled 1PC4 and 1PC5.

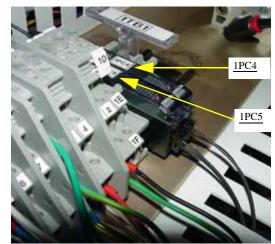


Figure 1-9—Close-up view of fiber optic amplifiers

4e) Wind the new fiber optic cables into a roll and secure them with cable ties (supplied in kit) to the underside of the base plate. See *Figure 1-10*.



Figure 1-10—Secure fiber optic cables to underside of base plate

NOTE: If a static tray is installed in addition to a TF30 Tray Feeder, one of these fiber optic cables will be used. See Step 20 on page 21 for information on installing a static tray.

- 4f) Remove the static tray platforms.
- 4g) Remove the standoffs from the base plate.

5. Remove Tube Feeder Vibratory Motors (if installed)

NOTE: If installing TF30 Tray Feeder in Position #2 only, Tube Feeder vibratory motors do not need to be removed.

- 5a) Disconnect Tube Feeder power cables.
- 5b) Remove 3 screws from each motor.
- 5c) Remove the motors.

6. Install Door Support

- 6a) Remove the cover from cable guide #1.
- 6b) Loosen the 3 screws attaching cable guide #1 to the frame. Do not remove the screws.

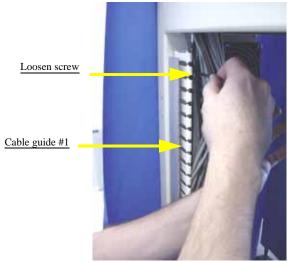


Figure 1-11—Loosen screws securing cable guide #1

6c) Slide the vertical door support between cable guide #1 and the frame of the system, ensuring that the 3 screws fit in the slots of the door support.



Figure 1-12—Slide door support between frame and cable guide #1

6d) Tighten the 3 screws.

NOTE: Do not re-install cable guide #1 cover at this time.

6e) Check that the door support is pushed inboard as far as possible. This is necessary so that the lower left door closes fully.

7. Install New Lower Left Door

- 7a) Install the new lower left door (supplied in kit) by lowering onto hinges. When the new door is installed, the door support should contact the inside of the door but not allow the door to extend beyond the frame.
- 7b) Route the wire harness from the new door into cable guide #1. See *Figure 1-13*.



Figure 1-13—Route wire harness into cable guide #1

WARNING: Check that the air tubing and wire harness are not pinched when the lower left door is closed.

8. Mount Switch Panel

8a) Remove 2 lower nuts from the exhaust fan using a 5/16 inch wrench. Install the switch panel over the 2 bolts as shown in *Figure 1-14*



Figure 1-14—Install switch panel

8b) Connect the switch panel harness to the connector from the door harness as shown in *Figure 1-15*.



Figure 1-15—Connect door wire harness to switch panel harness

9. Install New Tee Fitting and Connect Air Tubing

9a) Locate the air tube on the inside of the system input panel.

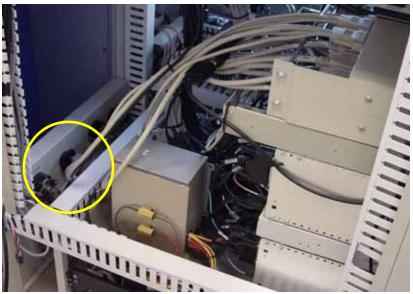


Figure 1-16—Existing air tube on inside of system input panel

- 9b) Cut the air tube about 2 inches below the elbow.
- 9c) Insert the new Tee fitting (supplied in kit) into the air tube.
- 9d) Connect the air tube from the new left door to the Tee fitting as indicated by the arrow in *Figure 1-17*.



Figure 1-17—Insert air tube from door into fitting as indicated by arrow

10. Route Wire Harness

10a) Remove covers from cable guides #2, #3, and #4. Route the wire harness through cable guides #2, #3, and #4 as indicated by the arrow.

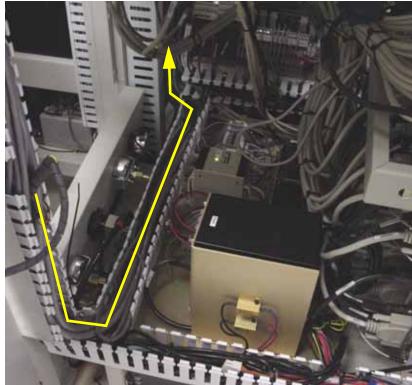


Figure 1-18—Route wire harness through cable guides #2, #3, and #4

11. Terminate Wires

Green/black wire

11a) Remove the black wire from 1D3 19 (coming from Amplifier 1PC4) and insert into a crimp lug. Insert the green/black wire into the other end. Crimp wires together.

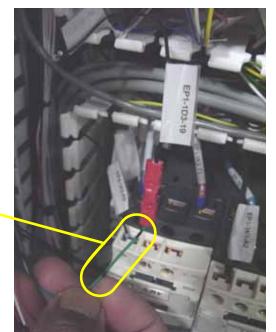


Figure 1-19—Crimp black wire and green/black wire

- 11b) Remove the black wire from 1D3 8 (coming from Amplifier 1PC5) and insert into a crimp lug. Insert the blue/black wire into the other end. Crimp wires together.
- 11c) Install a jumper wire (supplied in kit) between 1E on 1TB1 and 1 on 1D9.
- 11d) Terminate all other wires as indicated in Wiring Diagram (*Figure 1-20*).

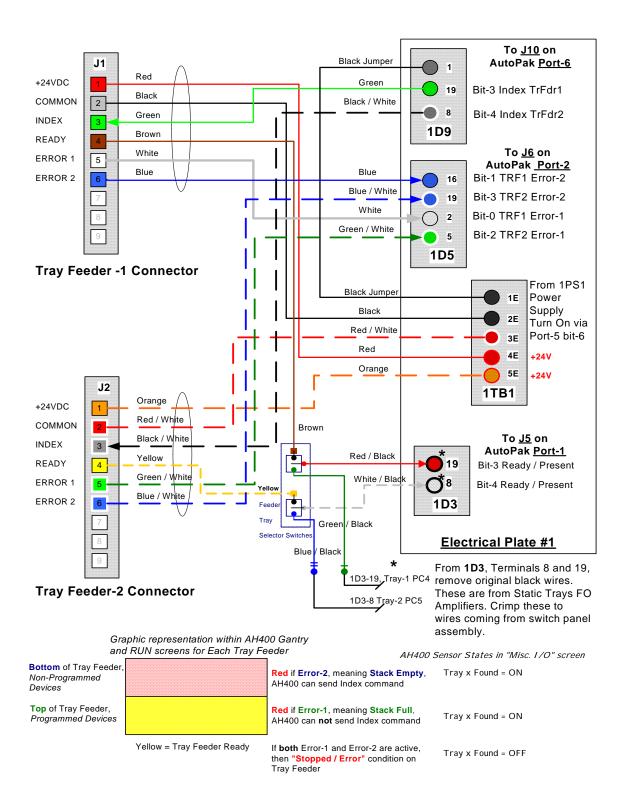


Figure 1-20—Wiring Diagram

11e) Replace covers on cable guides #1, #2, #3, and #4.

12. Replace Top Left Transparent Shield

- 12a) Remove the existing top left transparent shield by lifting.
- 12b) Replace with new top left transparent shield (supplied in kit).

NOTE: On older models, remove the 4 screws holding the hinges to frame. Remove old top left transparent shield with hinges attached.

13. Rotate Light Source (if needed)

NOTE: On some systems, the light source has already been rotated. Check your system. If the intensity adjustment knob is visible, the light source needs to be rotated. Complete Step 13.

- 13a) Open the lower left side door. Locate the light source for the camera system. The intensity adjustment knob is visible (see *Figure 1-21*).
- 13b) Disconnect power cables to the light source and the network hub.
- 13c) Pry the light source loose from its base with a flat blade screwdriver.



Figure 1-21—Light source with intensity adjustment knob visible

- 13d) Rotate the light source 180 degrees.
- 13e) Re-install power cables to the light source and network hub as shown in *Figure 1-22*.

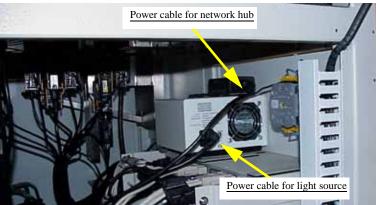


Figure 1-22—Light source rotated 180 degrees and power cables installed

14. Determine Mount Plate Position

Figure 1-23 shows the maximum number of programmers on a PS300 system. In the lower left corner of the work surface, either a Quad (standard) or a Dual Inline (special) programmer can be installed along with a TF30 Tray Feeder. Depending on the programmer and tray configuration, locate the mount plate in the Standard or the Forward position.

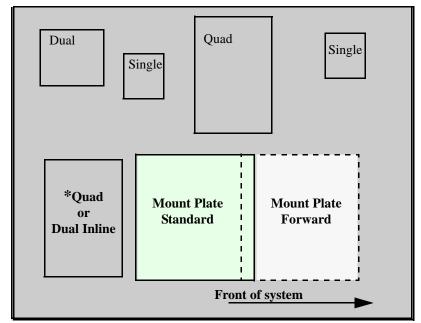


Figure 1-23—Mount Plate Standard and Mount Plate Forward

Use Mount Plate Standard for these configurations:

Position #1	Position #2	Position #3	*Additional Programmer
TF30 Tray Feeder	TF30 Tray Feeder	-	Dual Inline
TF30 Tray Feeder	Static tray (full access)	-	Dual Inline
Static tray (full access)	TF30 Tray Feeder	-	Dual Inline

Figure 1-24—Mount Plate Standard

Use Mount Plate Forward for these configurations:

Position #1	Position #2	Position #3	*Additional Programmer
Static tray (partial access)	-	TF30 Tray Feeder	Quad
Static tray - (partial access)		TF30 Tray Feeder	Dual Inline

Figure 1-25—Mount Plate Forward

15. Install Covers

Two covers (supplied in kit) are used to close openings on the base plate depending on the programmer configuration. The bottom cover is installed toward the front of the opening in the base plate; the top cover is installed toward the back of the opening.

Install covers, depending upon programmer configuration:

- If a Dual Inline programmer is installed, use the bottom cover only.
- If a Quad programmer is installed, no base plate covers are used.
- If no programmer is installed, install both top cover and bottom cover.



Figure 1-26—Installing the bottom cover

16. Install Mount Plate

- 16a) Place mount plate in the selected position on the base plate.
- 16b) Tighten the four screws.

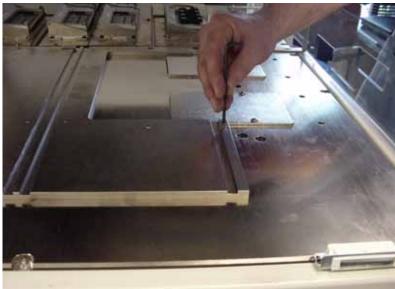


Figure 1-27—Tighten screws securing mount plate to base plate

17. Prepare to Install TF30 Tray Feeder(s)

17a) Set the switch panel to match system configuration. For example, the switch panel shown in *Figure 1-28* is set for a TF30 Tray Feeder in Position #1 (switch up), and a static tray in Position #2 (switch down).



Figure 1-28—Set switch panel to match tray configuration

- 17b) Ensure the top left transparent shield is closed and both sliders are in the open (up) position.
- 17c) Verify that the TF30 Tray Feeder does not have a magazine inserted.
- 17d) Adjust the TF30 supports on the lower left door so they are fully inboard.



Figure 1-29—Adjust TF30 supports fully inboard

17e) Locate the two 5 mm mounting screws (supplied in kit) and 5 mm hex wrench. Have them ready.

18. Install TF30 Tray Feeder



WARNING: TF30 Tray Feeders are heavy! They weigh ~39Kg each (~86 pounds) and should be handled by two or more people.

18a) Lift the TF30 Tray Feeder and align the side rails of the TF30 Tray Feeder conveyor with the slots on the mount plate.

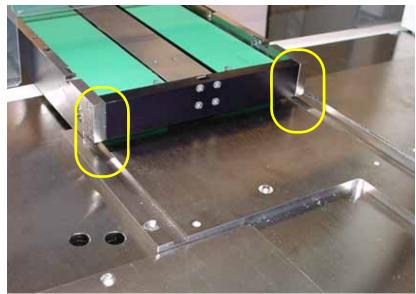


Figure 1-30—Align side rails of TF30 with slots on mount plate

18b) Slide TF30 Tray Feeder forward until the front of the TF30 Tray Feeder engages the two tabs at the far end of the slots on the mount plate.

WARNING: Be sure that both tabs are engaged. Otherwise, the TF30 Tray Feeder will not operate properly.

18c) While one person continues to support the TF30 Tray Feeder, the second person uses a 5 mm hex key to install two screws securing the TF30 Tray Feeder to the mount plate.

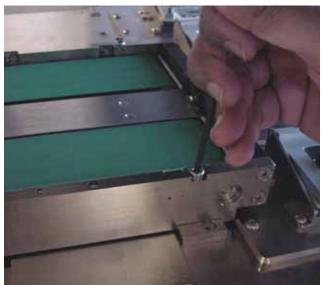


Figure 1-31—Install and tighten screws

WARNING: To prevent injury, TF30 Tray Feeder should be supported from the back until both screws are tightened.

- 18d) Slowly release the TF30 Tray Feeder.
- 18e) If only one TF30 Tray Feeder is installed, lower (close) the unused slider on the top left transparent shield.

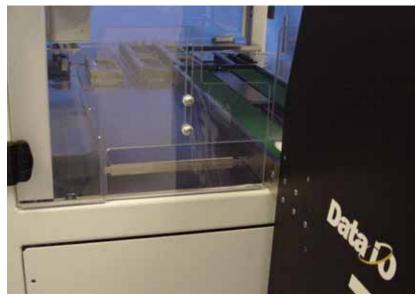


Figure 1-32—Unused slider is closed

19. Level TF30 Tray Feeder

19a) Place a level on top of the TF30 Tray Feeder.



Figure 1-33—Place level on TF30 Tray Feeder

19b) Level the TF30 Tray Feeder by adjusting the TF30 supports on the lower left door. Hold the adjustment provision with a 9/16 inch hex

wrench and turn the jam nut with a 5/8 inch hex wrench. See *Figure 1-34*.

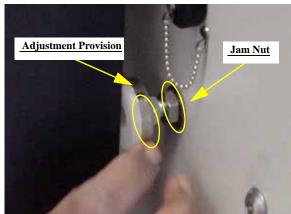


Figure 1-34—Adjustment provision and jam nut

19c) When the TF30 Tray Feeder is level, secure the TF30 supports in place. Hold the outside jam nut with a 5/8 inch hex wrench. Reach through the back panel and tighten the inside jam nut with a 5/8 inch hex wrench.

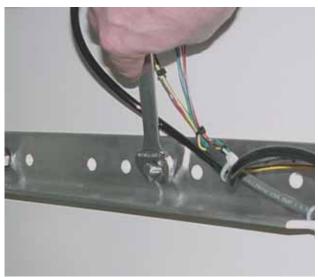


Figure 1-35—Tighten inside jam nut

19d) Install Second TF30 Tray Feeder (Optional)

If a second TF30 Tray Feeder will be installed, repeat Step 17 to Step 19.

20. Install Static Tray (Optional)

The static tray can be installed in Position #1 or Position #2 depending on the location of the TF30 Tray Feeder. In this example, the static tray is installed in Position #2.

20a) Install four standoffs on the mount plate.

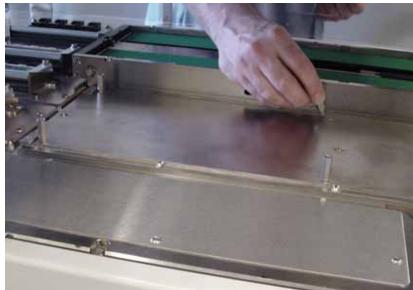


Figure 1-36—Install static tray standoffs on mount plate

- 20b) Untie the fiber optic cable corresponding to the static tray location. The fiber optic cable attached to Amplifier 1PC4 is used for the static tray in Position #1. The fiber optic cable attached to Amplifier 1PC5 is used for the static tray in Position #2.
- 20c) Route the fiber optic cable through the access hole on the base plate.



Figure 1-37—Route fiber optic through access hole

20d) Attach the fiber optic cable to the underside of the new static tray (supplied in kit).

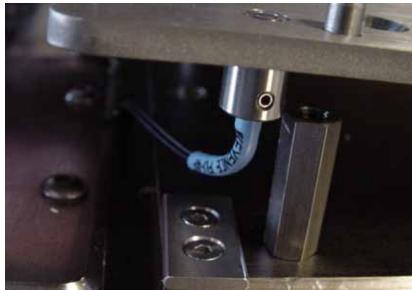


Figure 1-38—Fiber optic cable attached to new static tray

20e) Use the four screws (supplied in kit) to attach the static tray to the standoffs with the fiber optic cable inboard.

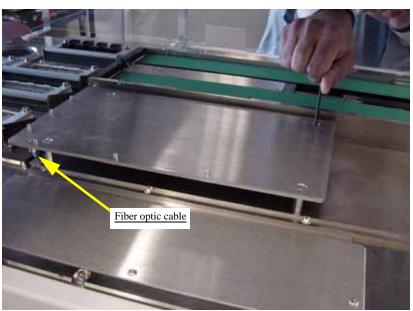


Figure 1-39—Attach static tray to standoffs with fiber optic cable inboard

The magnetic L bracket supplied with the new static tray is used to locate a tray in the proper position on the static tray surface. See *Figure 1-40*.



Figure 1-40—L bracket secures tray in position on static tray platform

21. Finish

- 21a) Reinstall the back panel.
- 21b) Plug the TF Simulator into the electrical connector corresponding to the installed TF30 Tray Feeder.



Figure 1-41—Plug in TF Simulator

- 21c) Plug the power cord into the system input panel.
- 21d) Connect the air supply on the system input panel.
- 21e) Turn on system power.

22. Check Wiring Connections

Complete the "Software Check" on page 42.

PS288FC Systems

This section describes how to install the TF30 Tray Feeder on a PS288FC system. Photos show the PS288FC.

NOTE: For information on installing the TF30 Tray Feeder on PP100, PS200 and PS300 systems, see "PP100, PS200, PS300 Systems" on page 5.

1. Prepare the System

- 1a) Turn off main power switch on the system input panel.
- 1b) Turn off the air supply and disconnect the air hose coming into the system.
- 1c) Remove all media, devices and adapters from the work envelope.

2. Replace Lower Left Door

- 2a) Lift the existing lower left door off its hinges. Hinges remain on the frame.
- 2b) Install the new lower left door (supplied in kit) by lowering onto the hinges.



Figure 1-42—New door installed

3. Remove Back Panel

3a) On the back of the system, loosen the screws securing the back panel.



Figure 1-43—Loosen screws on back panel

3b) Remove panel by lifting it up. Set aside. It will be reinstalled at Step 15a.

4. Install Switch Panel

4a) Remove the nuts on the 2 lower bolts that secure the exhaust fan to the back panel. Install switch panel over bolts and replace nuts.



Figure 1-44—Install switch panel to exhaust fan bolts

5. Remove Universal Static Tray Mount

- 5a) Remove the fiber optic cable from the static tray mount using a 0.05 inch hex wrench to loosen the small set screw on the bottom of the tray platform.
- 5b) Wind the fiber optic cable into a roll and secure with cable tie (supplied in kit) to the underside of the base plate. See *Figure 1-45*.



Figure 1-45—Secure fiber optic cable to underside of base plate

NOTE: If a static tray is installed in addition to a TF30 Tray Feeder, this fiber optic cable will be used. See Step 11 on page 35 for information on installing a static tray.

- 5c) Remove the static tray mount.
- 5d) Remove the standoffs from the base plate.

6. Install Door Support

- 6a) Place the new door support over the three holes drilled in the PS288FC frame.
- 6b) Tighten the three 10-32 screws using a 1/8 inch hex wrench.



Figure 1-46—Tighten three screws holding new door support

6c) Check that the door support is pushed inboard as far as possible. This is necessary so that the lower left door closes fully.

7. Route Wire Harness

7a) Secure the wire harness and air tube with two cable ties.

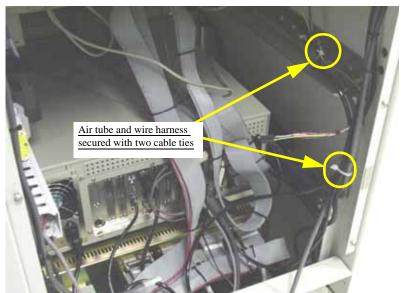


Figure 1-47—Wire harness and air tube secured with cable ties

7b) Remove the top 2 screws that hold the system input panel in position. Loosen the bottom 2 screws.

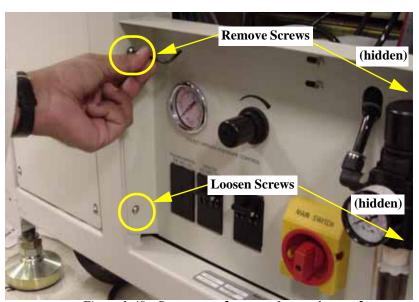


Figure 1-48—Remove top 2 screws. Loosen bottom 2 screws

- 7c) Lower the system input panel.
- 7d) On the inside of the system input panel, remove the plug from the air manifold. Insert the new air tube.

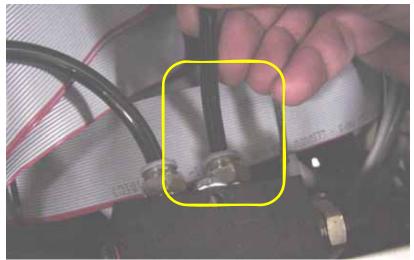


Figure 1-49—Insert air tube from door into air manifold

7e) Connect the switch panel harness to the connector from the door harness as shown in *Figure 1-50*.



Figure 1-50—Connect door wire harness to switch panel harness

7f) Route the wire harness along the floor of the PS288 system.



Figure 1-51—Route wire harness along floor of system

7g) Open the right side door.



Figure 1-52—Open right side door

7h) Route the wires across the bottom of the PS288 system. See Figure 1-53.

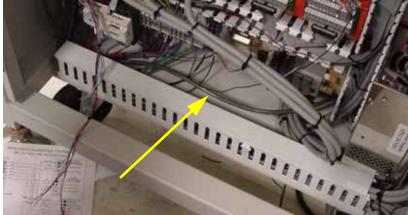


Figure 1-53—Wire harness routed on floor of PS288

7i) Route the wire harness through the cable guides as indicated by the arrows in *Figure 1-54*.

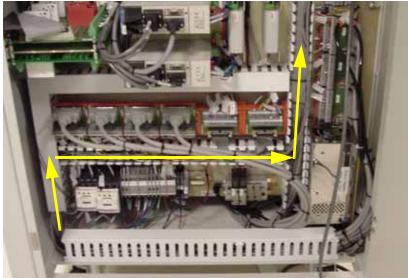
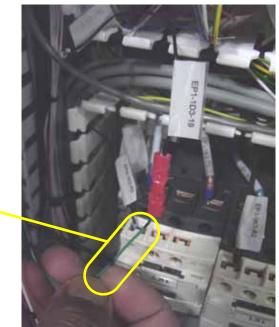


Figure 1-54—Route wires as indicated by arrows

8. Terminate Wires

8a) Remove the black wire from 1D3 19 (coming from Amplifier 1PC4) and insert into a crimp lug. Insert the green/black wire into the other end. Crimp wires together.



Green/black wire

Figure 1-55—Crimp black wire and green/black wire

- 8b) Remove the black wire from 1D3 8 (coming from Amplifier 1PC5) and insert into a crimp lug. Insert the blue/black wire into the other end. Crimp wires together.
- 8c) Install a jumper wire (supplied in kit) between 1E on 1TB1 and 1 on 1D9.
- 8d) Terminate all other wires as indicated in Wiring Diagram (*Figure 1-56*).

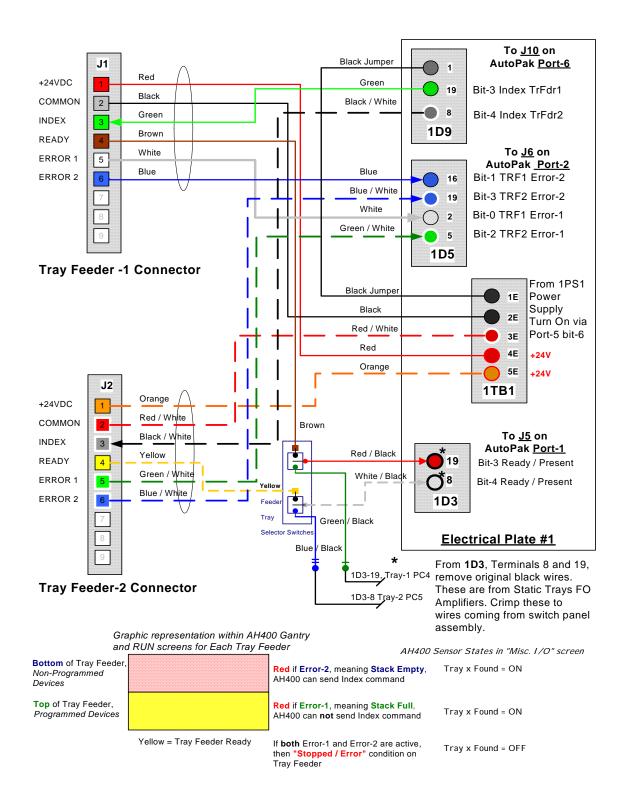


Figure 1-56—Wiring Diagram

8e) Replace covers on cable guides.

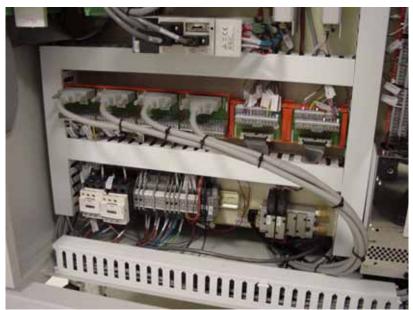


Figure 1-57—Replace covers on cable guides

9. Replace Top Left Transparent Shield

- 9a) Remove the existing top left transparent shield by lifting it off its hinges.
- 9b) Replace with new top left transparent shield (supplied in kit).

10. Install Mount Plate

- 10a) Place mount plate in position on the base plate.
- 10b) Tighten the four screws (locations indicated by circles in Figure 1-58).

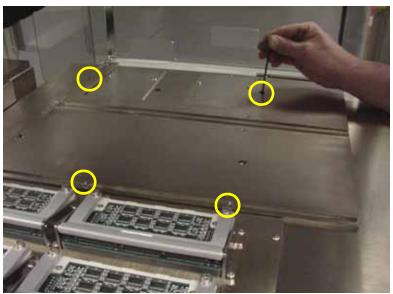


Figure 1-58—Tighten four screws securing mount plate to base plate

11. Install Static Tray (Optional)

A static tray can be installed in addition to the TF30 Tray Feeder, if desired. The static tray is installed on the mount plate, toward the front of the system.

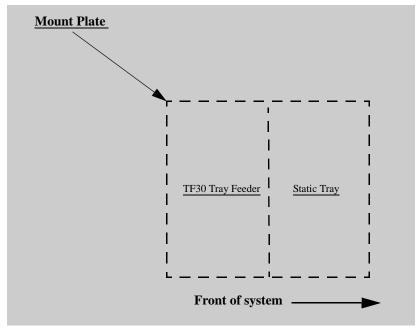


Figure 1-59—Locations for TF30 Tray Feeder and static tray

- 11a) On the mount plate, install four standoffs for the static tray.
- 11b) Untie the fiber optic cable attached to Amplifier 1PC4.
- 11c) Route the fiber optic cable through the access hole on the base plate.
- 11d) Attach the fiber optic cable to the underside of the new static tray (supplied in kit).
- 11e) Use the four screws (supplied in kit) to attach the static tray to the standoffs with fiber optic cable inboard.



Figure 1-60—Static tray installed

12. Prepare to Install TF30 Tray Feeder

12a) Set the switch panel to match configuration. For example, the switch panel shown in *Figure 1-61* is set for a TF30 Tray Feeder in Position #2 (switch up), and a static tray in Position #1 (switch down).

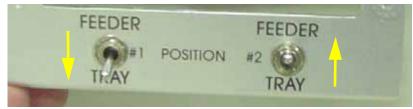


Figure 1-61—Set switch panel to match tray configuration

- 12b) Ensure the top left transparent shield is closed and both sliders are in the open (up) position.
- 12c) Verify that the TF30 Tray Feeder does not have a magazine inserted.
- 12d) Adjust the TF30 supports so they are fully inboard.



Figure 1-62—Adjust TF30 supports fully inboard

12e) Locate the two 5 mm mounting screws (supplied in kit) and 5 mm hex wrench. Have them ready.

13. Install TF30 Tray Feeder



WARNING: TF30 Tray Feeders are heavy! They weigh ~39Kg each (~86 pounds) and should be handled by two or more people.

13a) Lift the TF30 Tray Feeder and align the side rails of the TF30 Tray Feeder conveyor with the slots on the mount plate. Slide TF30 Tray Feeder forward.



Figure 1-63—Align side rails of TF30 with slots on mount plate and slide forward

13b) Slide until the TF30 Tray Feeder contacts the two tabs at the far end of the slots on the mount plate.

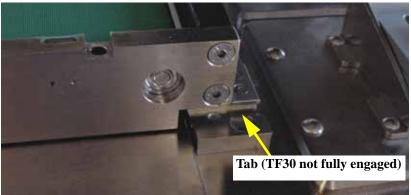


Figure 1-64—TF30 Tray Feeder contacts the tabs

13c) Push the TF30 Tray Feeder until both tabs are fully engaged.

WARNING: Be sure that both tabs are engaged. Otherwise, the TF30 Tray Feeder will not operate properly.

13d) While one person continues to support the TF30 Tray Feeder, the second person uses a 5 mm hex key to install two screws securing the TF30 Tray Feeder to the mount plate.

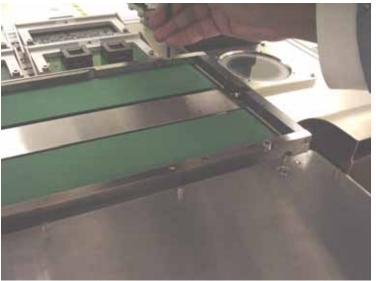


Figure 1-65—Install and tighten screws

WARNING: To prevent injury, TF30 Tray Feeder should be supported from the back until both screws are tightened.

13e) Slowly release the TF30 Tray Feeder. *Figure 1-66* shows a TF30 Tray Feeder and static tray installed.



Figure 1-66—TF30 Tray Feeder and static tray

13f) Close the unused slider on the transparent shield.



Figure 1-67—Unused slider is closed

14. Level TF30 Tray Feeder

14a) Place a level on top of the TF30 Tray Feeder.



Figure 1-68—Place level on TF30 Tray Feeder

14b) Level the TF30 Tray Feeder by adjusting the TF30 supports on the lower left door. Hold the adjustment provision with a 9/16 inch hex wrench and turn the jam nut with a 5/8 inch hex wrench. See *Figure 1-69*.

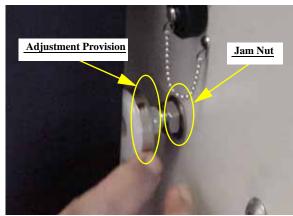


Figure 1-69—Adjustment provision and jam nut

14c) When the TF30 Tray Feeder is level, secure the TF30 supports in place. Hold the outside jam nut with a 5/8 inch hex wrench. Reach through the back panel and tighten the inside jam nut with a 5/8 inch hex wrench.

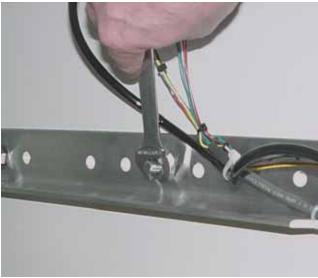


Figure 1-70—Tighten inside jam nut

15. Finish

- 15a) Reinstall the back panel.
- 15b) Plug the TF Simulator into the electrical connector corresponding to the installed TF30 Tray Feeder.



Figure 1-71—Plug in TF Simulator

- 15c) Plug in the system power cord on the system input panel.
- 15d) Connect the system air supply on the system input panel.
- 15e) Turn on system power.

16. Check Wiring Connections

Complete the "Software Check" on page 42.

Software Check

Check TF30 Tray Feeder wiring connections by completing the USICHECK software utility.

1. Launch USICHECK

1a) From the Handler Computer, launch C:\INSTALL\Motion_and_IO and Autopak\USICheck.exe

NOTE: On older systems, launch
C:\INSTALL\MEI and Autopak\USICHECK.exe

2. Select Input and Output Ports

2a) In the USICHECK software, use the Down arrow to select **TEST ONE INPUT PORT & ONE OUTPUT PORT.** Press <Enter>.

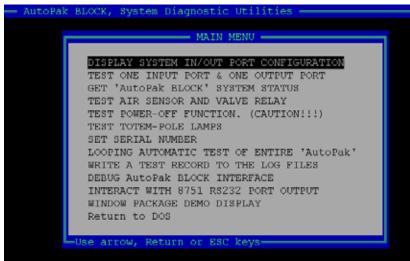


Figure 1-72—TEST ONE INPUT PORT & ONE OUTPUT PORT

2b) On the CHOOSE AN INPUT AND AN OUTPUT PORT TO TEST window, use the Up and Down arrows to select **Port-1**, **Input** and press <Enter>. Then select **Port-5**, **Output** and press <Enter>. And finally, select **Accept Selection** and press <Enter>.

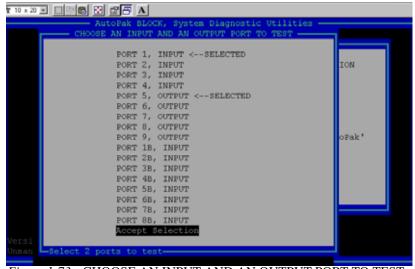
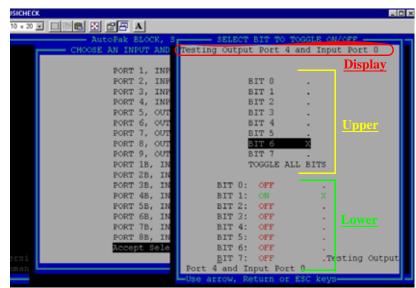


Figure 1-73—CHOOSE AN INPUT AND AN OUTPUT PORT TO TEST



The SELECT BIT TO TOGGLE ON/OFF window displays.

Figure 1-74—SELECT BIT TO TOGGLE ON/OFF

In the SELECT BIT TO TOGGLE ON/OFF window, the 9 AutoPak ports are labeled 0 through 8. In Step 2b, Port-1 Input and Port-5 Output were selected. In this window, those selections display as Input Port-0 and Output Port-4. See "Display" in *Figure 1-74*.

The upper portion shows Output Port Bit-0 to Bit-7. These can be toggled On/Off by selecting and pressing <Enter>, which sends a command/signal from the AutoPak. See "Upper" in *Figure 1-74*.

The lower portion shows status (as sensed by the Input Port of the AutoPak) for Bit-0 to Bit-7. These can be either ON or OFF. See "Lower" in *Figure 1-74*.

The front of AutoPak displays LEDs grouped into ports, from Port-1 through Port-9. Each port contains 8 LEDs, one each for Bit-0 to Bit-7 respectively.



Figure 1-75—AutoPak LEDs

To change Input or Output ports:

- Within the USICHECK software utility, press <Esc>.
- On the CHOOSE AN INPUT AND AN OUTPUT PORT TO TEST window, select an Input port and press <Enter>, Select an Output port and press <Enter>. Press <Enter> on Accept Selection line.

To toggle a Bit On/Off:

• Select the required Bit and press <Enter>.

TF#1 = Position #1 (TF30 Tray Feeder toward front of system)
TF#2 = Position #2 (TF30 Tray Feeder toward back of system)

3. Complete the Test Procedure

3a) Complete all actions described in TF Simulator Test Procedure (see *Figure 1-76*).

Selected Input Port	Selected Output Port	Action	Observation on USICHECK	Observation on TF Simulator	Observation on AutoPak LEDs
Port-1	Port-5	USICHECK: Toggle Bit-6 On/Off	Bit 6 X / •	Power LED On/Off	Port-5 Bit-6 On/Off
Port-1	Port-6	USICHECK: Toggle Bit-3 On/Off for TF#1	Bit 3 X / •	Index LED On/Off TF#1	Port-6 Bit-3 On/Off
Port-1	Port-6	USICHECK: ToggleBit-4On/Off for TF#2	Bit 4 X / •	Index LED On/OFF TF#2	Port-6 Bit-4 On/Off
Port-1	Port-6	TF SIMULATOR: Toggle Ready Switch for TF#1	Port-1 Bit-3 On/Off	-	Port-1 Bit-3 On/Off
Port-1	Port-6	TF SIMULATOR: Toggle Ready Switch for TF#2	Port-1 Bit-4 On/Off	-	Port-1 Bit-4 On/Off
Port-2	Port-6	TF SIMULATOR: Toggle Error-1 Switch for TF#1	Port-2 Bit-0 On/Off	-	Port-2 Bit-0 On/Off
Port-2	Port-6	TF SIMULATOR: Toggle Error-2 Switch for TF#1	Port-2 Bit-1 On/Off	-	Port-2 Bit-1 On/Off
Port-2	Port-6	TF SIMULATOR Toggle Error-1 Switch for TF#2	Port-2 Bit-2 On/Off	-	Port-2 Bit-2 On/Off
Port-2	Port-6	TF SIMULATOR: Toggle Error-2 Switch for TF#2	Port-2 Bit-3 On/Off	-	Port-2 Bit-3 On/Off

Figure 1-76—TF Simulator Test Procedure

If all test procedures are positive, the TF30 Tray Feeder connectors are functioning properly.

If any test procedure fails, turn off the system, re-check the wiring and complete the test procedure again.

4. Exit USICHECK

- 4a) In USICHECK software utility, ensure that Port-5 Bit-6 is Off (•).
- 4b) Press <Esc> twice.
- 4c) Use the Down arrow to select **Return to DOS**.
- 4d) Press <Enter>.

Install AH400

Install the AH400 software from the CD supplied in kit.

Edit these lines in the C:\AH400_32\WinAH400.ini file on the Handler Computer:

```
;----- Standard and Automatic Trays ------;
There are two tray 'models' or types,
;ModelTray1 for First Tray
;ModelTray2 for Second Tray
;Values can be:-
;"STD" for Standard or Static Tray platform
;"AutoInOut 1" for Automatic Tray Feeder, TF20 or TF30
;ModelTray1=STD
;ModelTray2=AutoInOut 1
ModelTray1=AutoInOut 1
ModelTray2=STD
```

Figure 1-77—Edit lines in WinAH400.ini file

For operation, adjustment and maintenance of TF30 Tray Feeders, refer to the TF30 Tray Feeder Instruction Manual that came in the Installation Kit.