BURFORD® CORP.

SERVICE MANUAL

FOR YOUR

BURFORD® PATTERN SPLITTER/
CROSS SPLITTER

MODEL PSCS-36-L

ORIGINAL INSTRUCTIONS

MODEL NUMBER_____
SERIAL NUMBER_____
WIRING DIAGRAM_____ISSUE___

Date: July 25, 2012

Manual Part No. SO086351 Rev “A”

CE DECLARATION OF CONFORMITY

We hereby declare that the following machinery complies with the essential health and safety requirements of the Machinery Directive 89/392/EEC, 91/368/EEC and 93/44/EEC and other harmonized standards.

Name type or model - PSCS-36L
Serial Number - 18805
Machine description - **Model Pattern Splitter Cross Splitter**; Industrial equipment used by bread baking facilities for the purpose of making shallow splits on bread-dough pieces prior to baking. The splits are made by directing pressurized, filtered water through solenoid valves. The splitter and its electrical enclosure are both mounted to the **Model 946LI-200 Conveyor**. SO 86351

Name of manufacture or supplier: Burford Corp.

Full postal address including country of origin:
P.O. Box 748
1 Mile North
Maysville, OK 73057
United States of America

This machinery has been designed and manufactured in accordance with the following transposed harmonized European standards:

EN ISO 12100:2003 parts 1 & 2: Safety of Machinery….Basic concepts, general principles for design
BS EN ISO 13857:2008 Safety of Machinery…..……Safety distances to prevent danger zones being reached by the upper limbs
BS EN 349: 1993 Safety of Machinery……..……Minimum gaps to avoid crushing of parts of the human body
BS EN ISO 13850:2006 Safety of Machinery……Emergency stop equipment, functional aspects – principles for design
BS EN 60204 part 1: 2006 Safety of Machinery……..….Electrical equipment of machines

A technical construction file for this machinery is retained at the office of Burford Corp. at the above address.

Authorized representative:
Terry O'Donoghue
42 Hornbeam Avenue
Red Lodge
Bury St Edmunds
Suffolk IP28 8YH
Great Britain

Declaration:
I declare that being the responsible person appointed by the manufacturer (or nominated authorized representative of the manufacturer established in the EC), the above information in relation to the supply/manufacturer of this machinery is in conformity with the stated standards and other related documents following the provisions of 93/44/EEC Directives.

Signed: _____ Date: 7-18-2012
Name: Terry O'Donoghue Position: Authorized Representative
Employer: Burford Corp. Place of declaration: Maysville, OK - USA

SAFETY PRECAUTIONS

As Burford® Corp. strives to promote safety in the maintenance and operation of Burford® equipment, we request that the following safety procedures be followed, along with any additional safety procedures set by the customer's in-plant safety officers or local codes.

1. Read the manual completely before attempting installation or operation of this unit.

2. This machine may contain programs that are password protected. Contact your supervisor or Burford® Corp. for password.

3. Incoming electrical power must be properly shielded, routed, and grounded. All safety codes should be followed. Study wiring diagrams before attempting installation.

4. Disconnect power to equipment before removing any guards or covers. Replace guards or covers before resuming operation of the unit.

5. Loose clothing, jewelry and long hair should be considered a safety hazard around mechanical equipment. Ensure that they will not be entangled in the equipment.

6. Keep clear of moving machine parts. Bodily harm and/or serious injury may result from contact with moving gears, sprockets, chains or pneumatically controlled machine components.

7. Do not bypass safety switches.

8. Do not attempt repairs while equipment is running.

9. Use only original equipment parts designed to safely operate in the equipment.

10. Only authorized personnel should be allowed to operate or perform maintenance on the unit.

11. This unit is not washdown ready. Do not wash the unit or any of its electrical or mechanical components, with any form of high pressure or running liquids.

DISCLAIMER

The descriptions and specifications contained in this Service Manual were in effect when this manual was approved for printing. Our policy is one of continuous improvements, and we do hereby reserve the right to discontinue models at any time, or to change specifications, prices, or design without notice and without incurring obligations.

Burford® Corp. expressly disclaims any liability for damages and/or injuries caused as a result of negligence or misuse of its product. Such negligence or misuse includes, but is not limited to, software/program alteration, removal of guards, faulty wiring due to improper installation, subjecting the unit to washdown environments or any physical or mechanical changes made to a Burford® unit, by anyone other than a qualified Burford® Technician.

Burford® equipment should only be used for the purpose for which it was sold, and should not be modified in any way without notifying the General Manager of Burford® Corp. in writing of the modification.

The original language for this document is English. Translations to other languages may not be accurate.

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1.0 INTRODUCTION

The Burford® PSCS Splitter has been designed to provide a knife-like split, of a particular pattern on top of proofed dough. This system provides precise split location in relation to the pan shape and program stored in the motion controller. The Burford® PSCS Splitter brings together precise application, convenience of operation and ease of maintenance in one system.

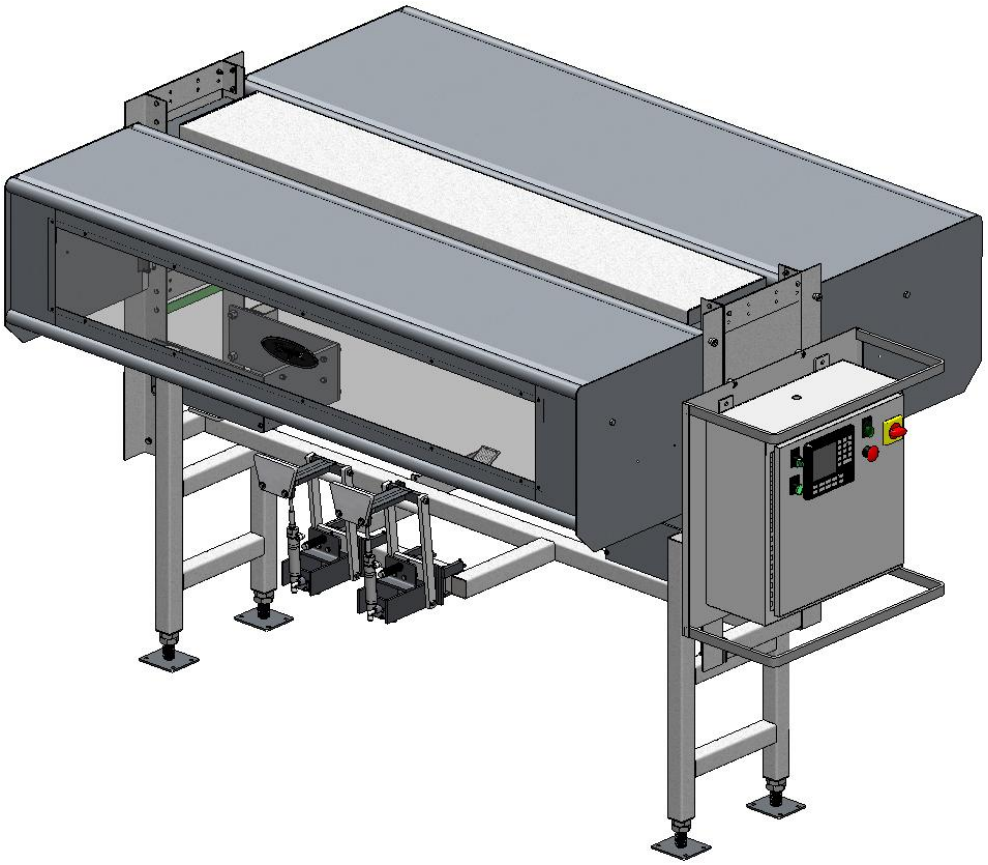


Fig. 1-1 PSCS-36 Left Hand

1.0 INTRODUCTION cont'd.

1.1 Specifications

SPECIFICATIONS	
Electrical:	
	220 V_{AC}, 50/60 H_Z, 1 Φ, 10 A
Air:	
	80 PSI @ 5 SCFM
Water:	
	40 PSI @ 30 GPH

1.2 Models

MODELS
PSCS-36-L Product travels right to left viewed from operator side.

2.0 INSTALLATION PROCEDURES

The Burford® PSCS Splitter was shipped to you completely assembled. There are two ways to purchase the unit. Mounted onto a Burford® conveyor ready to roll into a given location or assembled to mount onto an existing conveyor system.

Note:	The Burford® PSCS Splitter was shipped with castors for ease of mobility. Once a permanent location has been determined, remove castors and mount directly to floor for increased stability.

2.1 Factory Installation

A factory-trained technician may be hired for the installation of your PSCS. Arrangements can be made by calling the Service Manager at Burford® Corp. located in:

Maysville, Oklahoma, USA.
1-887-BURFORD® or (405)-867-4467

To install the unit, the following instructions are recommended:

1. Electrical connection and hookups should be done by a qualified electrician to incorporate suitable service in compliance with all safety requirements and local codes.

2. After uncrating, check for damage. If there is any, notify the carrier.

3. Find the location for the unit to be installed. This will have been determined by the drawings that were sent to Burford® Corp. showing conveyor width, height, and nearby obstructions.

2.2 Installation Of PSCS On A Burford® Conveyor

1. Install and secure all four casters to PSCS frame.

2. Roll the unit into place, remove casters, and attach legs to floor using anchors.

3. Hook up, water supply to incoming connection on water filter system, Air supply to incoming connection on F.R.L. and electrical power to main enclosure.

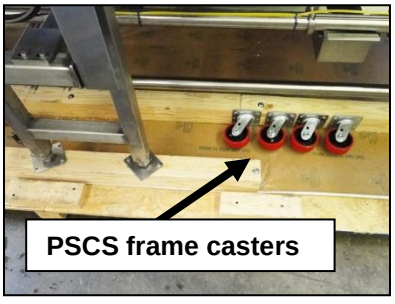


Fig. 2-1 Install Casters

4. Turn on the main disconnect, power up, and cycle the unit with a pan to insure proper operation (see Section 2.4 for purging instructions).

2.0 INSTALLATION PROCEDURES cont'd.

2.3 Installation On An Existing Conveyor

2.3.1 Conveyor requirements

1. The conveyor used should have at least 60 inches of free length. This distance should be measured from the conveyor sides only, since some conveyor chains extend past the conveyor sides.

2. The sides of the conveyor must be free of any interference from bolts, conduit, motors, shafts, junction boxes, guarding, support members, etc.

3. The underside of the conveyor must be clear of the interference from bolts, conduit, motors, shafts, junction boxes, guarding, support members, etc.

4. The top of the conveyor should be an open style, so the pan present sensors have an unobstructed path between them.

5. Pan guides must be used to keep the pans straight when traveling through the splitter. The guides should not extend more than 1-1/2 inches above the top of the pan.

6. The conveyor chosen should not allow the pans to stop, turn, or back-up.

7. Area around splitter installation site should be clear of any obstructions and splitter shall not be installed in such a way as to create a safety hazard, or block a normal passageway. Clearance must conform to all local safety codes.

8. Installation site should have ample clearance on operator control side for easy access, storage of pump cart and normal maintenance.

2.0 INSTALLATION PROCEDURES cont'd.

2.3 Installation On An Existing Conveyor cont'd.

2.3.2 Installation

1. Unbolt the pan stop cross support.

2. Determine the proper height to drill the conveyor mounting holes. As a reference, the splitter nozzles should be 1 to 2 inches above the product.

3. Drill the mounting holes.

4. Set the machine in place.

5. Reinstall the pan stop cross support.

6. Hookup electrics, air, and water.

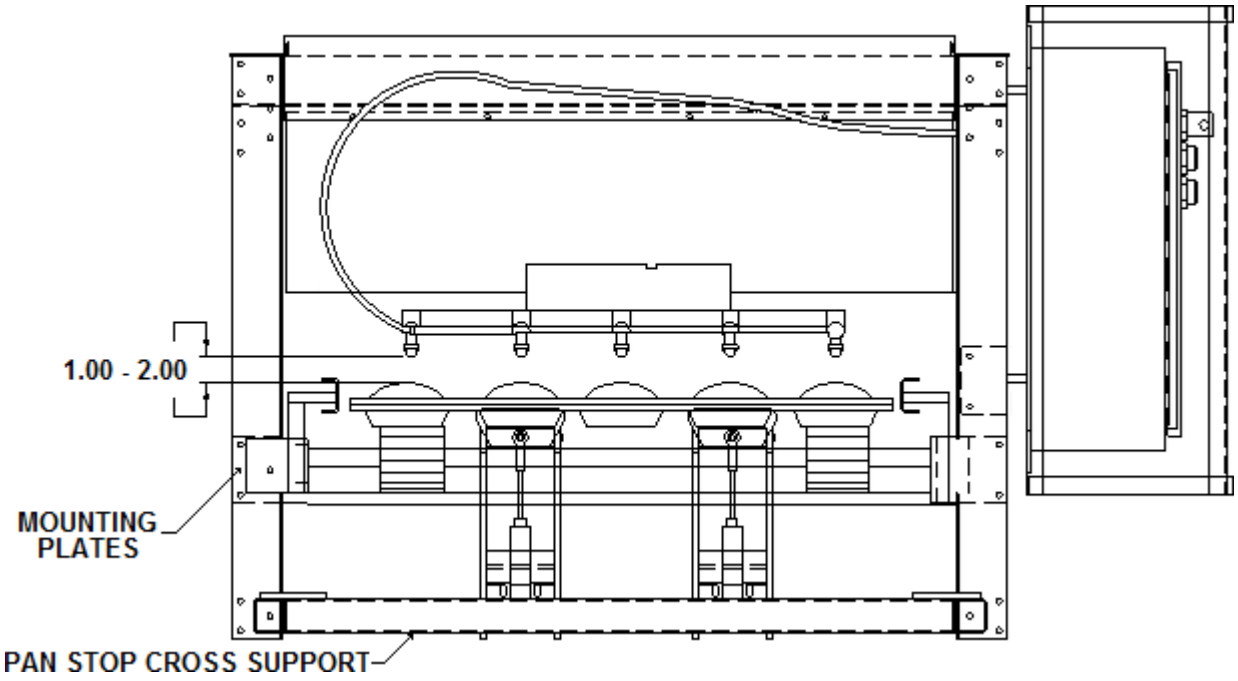


Fig. 2-2 Installation Reference Diagram

2.0 INSTALLATION PROCEDURES cont'd.

2.4 Raising And Lowering Covers

1. The covers on the PSCS are raised and lowered by pneumatic cylinders that are controlled from the main enclosure. Each cover, infeed and discharge, is independently controlled.

Caution:	Only one (1) cover should be raised or lowered at any time.

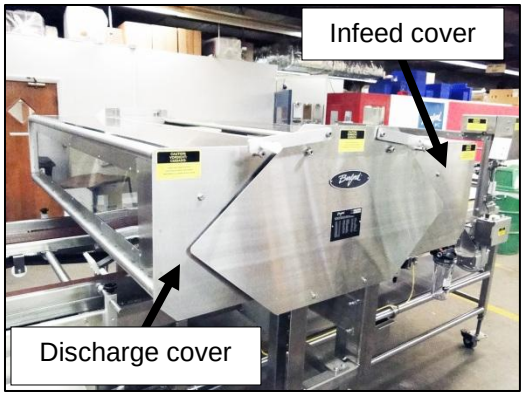


Fig. 2-3 Raising And Lowering Covers

2. To lift a cover turn and hold its corresponding switch in the "UP" position. Continue to hold the switch until the safety latch engages and the cover is secure.

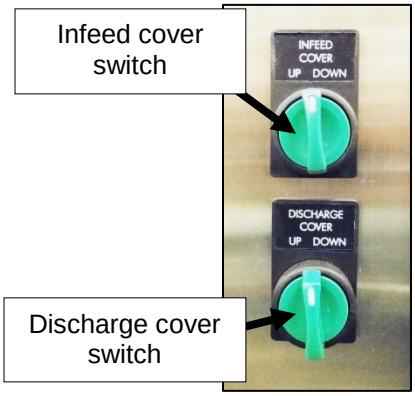


Fig. 2-4 Cover Lift Switches

Caution:	Ensure that safety latch is fully engaged before continuing any work or maintenance.

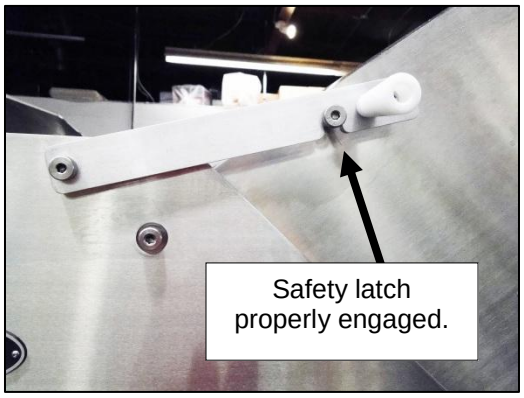


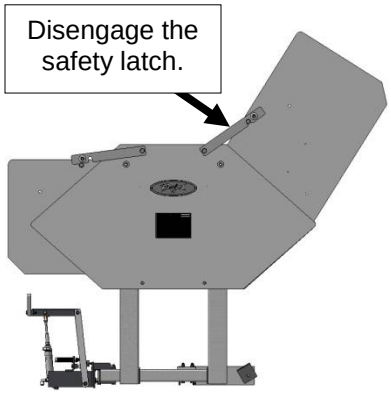
Fig. 2-5 Safety Latch Engaged

2.0 INSTALLATION PROCEDURES cont'd.

2.4 Raising And Lowering Covers cont'd.

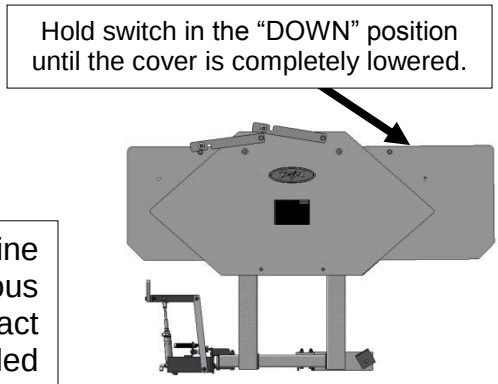
3. To lower a cover, make sure the surrounding area is clear of all obstructions, including personnel.

4. Disengage the safety latch.



Warning:	Ensure the surrounding area is clear of all obstructions including personnel.

5. Turn and hold corresponding switch in the "DOWN" position until the cover has been lowered completely.



Caution:	Keep clear of moving machine parts. Bodily harm and/or serious injury may result from contact with pneumatically controlled machine components.

6. Verify proper safety latch position.

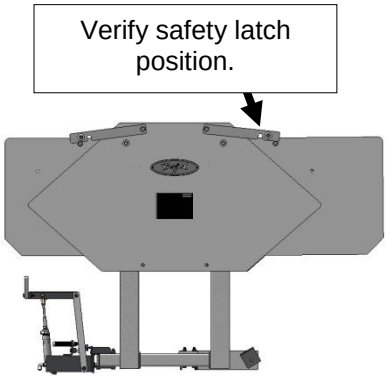


Fig. 2-6 Lowering Covers

2.0 INSTALLATION PROCEDURES cont'd.

2.5 Purging

Note:	It is very important to purge all the air from the manifold and nozzles for proper operation of the Splitter. Air in the system will cause inconsistent nozzle operation.

When the Splitter is initially installed, all water lines must be purged, which can take 15-20 minutes to accomplish. However, once the main lines have been purged, they will stay full of water so that subsequent purging, due to changing of manifolds, can be done more quickly. The proper procedure is as follows.

1. Ensure that the mode selector switch is in the "STANDBY" position while installing and removing the manifold.

Warning:	During this procedure do NOT switch mode selector to "RUN"; the unit will cycle the moment the photocell is blocked, which could result in personal injury. Ensure the mode selector switch is in the "STANDBY" position.

2. Open a bleeder valve and use the purge function to "PURGE". Allow the water to flow until a smooth continuous stream appears. Close the valve and then open another bleeder valve, bleeding the second bank of nozzles the same way. Repeat until all nozzle banks have been purged. All nozzles should shut the water flow off very abruptly. Close the bleeder valve and test for proper performance of spray.

The test procedure to ensure that the air is removed from the manifold assembly is as follows.

Note:	It is sometimes difficult to determine if the manifold has been sufficiently purged. Allow plenty of time to perform the purge procedure.

By operating the purge function, every time the water is turned off, the stream spraying from the tips should have a clean and instant cut off. There should be no dribbling or slow stopping of water. If this occurs, you will need to repeat the steps for purging until a clean stop of water is apparent, and then switch to the "RUN" mode.

Some Splitters are supplied with more than one manifold. Every time a manifold is changed, the bleeder valves should be closed upon installing. Then follow the purge procedures. When removing the manifold, leave the bleeder valves closed. This will help make the purge procedure quicker the next time manifold is used.

Note:	If a particular spray tip cannot be purged a problem may exist with the check screen. Change check screen and repeat purging procedure.

2.0 INSTALLATION PROCEDURES cont'd.

2.6 Manifold Installation

The Burford® PSCS splitter is equipped with two manifold mounting locations. The pattern and straight splitter bar manifold must be mounted in location one (1) and the cross splitter bar manifold must be mounted in location two (2). The cross splitter manifold requires both water supply hoses to be connected.

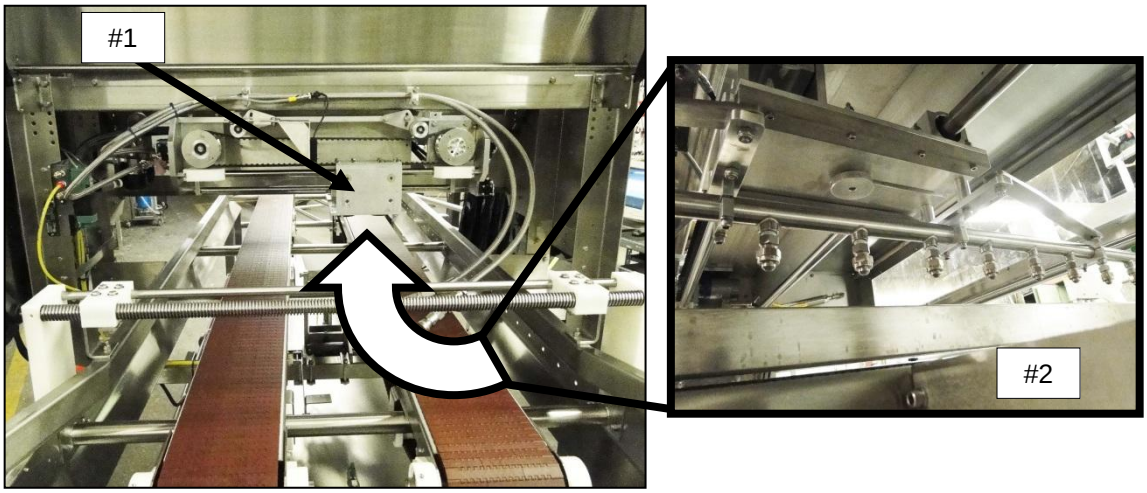


Fig. 2-7 Manifold Installation

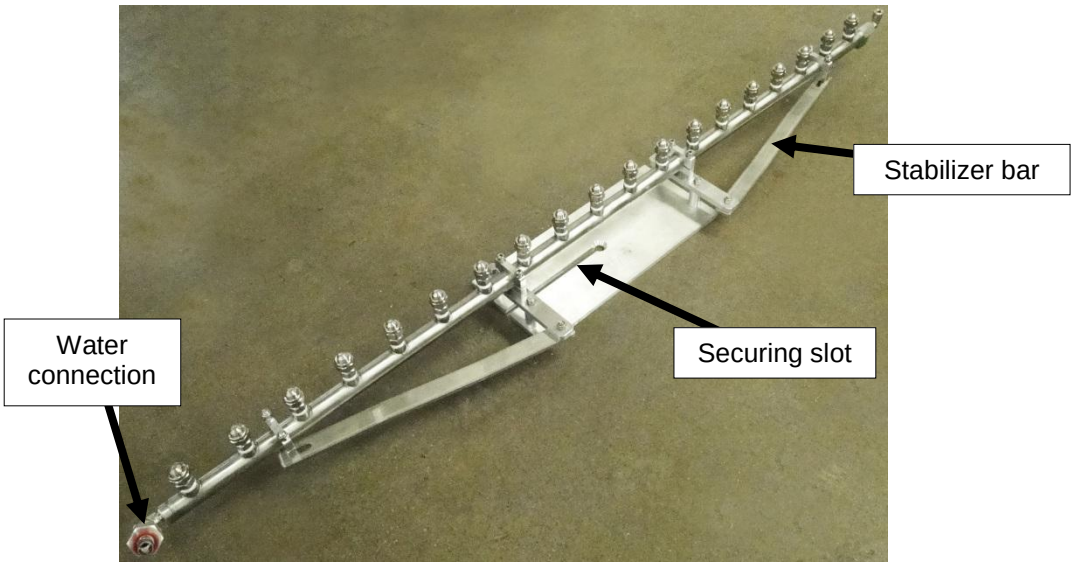


Fig. 2-8 Manifold

3.0 OPERATION PROCEDURES

3.1 Theory Of Operation

The Burford® PSCS Splitter creates one of three different types of split patterns (straight, cross or pattern) on the top of the dough piece. The location and type of the split is determined by the data entered by the user when setting up individual varieties (this function is password protected). Individual varieties are selected by using the display located on the control panel.

The pattern split sequence is performed while the pan is moving through the unit. The cross split sequence utilizes the pan stop to control the position of the pan while completing the split cycle. As the pan travels toward the splitter, the leading edge of the pan triggers a photoelectric sensor. The pan sensor tells the PLC that a pan is present and that a splitting cycle may begin. The PLC constantly monitors the output of the motion program controller to obtain the exact location of the spray manifold. Utilizing the selected variety's settings from the operator interface, the unit then completes the split type on the pan. The carriage holds an array of nozzles that are arranged in a pattern, which matches the pattern of the cups in the pan. After completion of the split sequence the carriage goes to the home position and awaits a new signal from the pan sensor.

Note:	Verify a 2" space between pans and a constant conveyor speed is maintained.

3.0 OPERATION PROCEDURES cont'd.

3.2 Control Panel

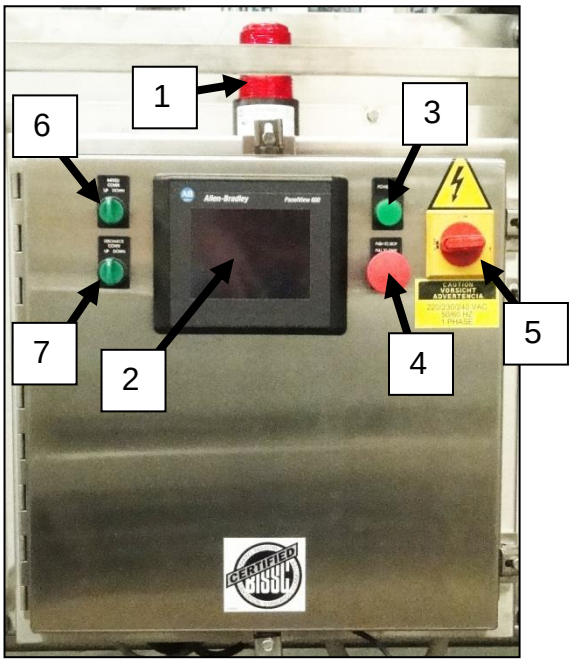


Fig. 3-1 Control Panel

Ref	Function	Description
1	Alarm Beacon	Signals the operator there is an issue with the manifold carriage.
2	Operator Display	This is the primary operator interface with the unit. Allows access to screens required for setup and operation of the unit.
3	"POWER ON" Lamp	When illuminated, indicates the unit is energized and ready to operate.
4	"PUSH TO STOP PULL TO START"	Removes electrical power from the PLC, disabling all machine functions (Push – Off / Pull – On).
5	Main Electrical Disconnect	Removes electrical power from all components within the main electrical enclosure.
6	"INFEED COVER UP/DOWN"	This switch controls the cover on the infeed side of the unit. Turn the switch to the "UP" position to lift the cover and to the "DOWN" position to lower the cover.
7	"DISCHARGE COVER UP/DOWN"	This switch controls the cover on the discharge side of the unit. Turn the switch to the "UP" position to lift the cover and to the "DOWN" position to lower the cover.

3.0 OPERATION PROCEDURES cont'd.

3.3 Operator Interface

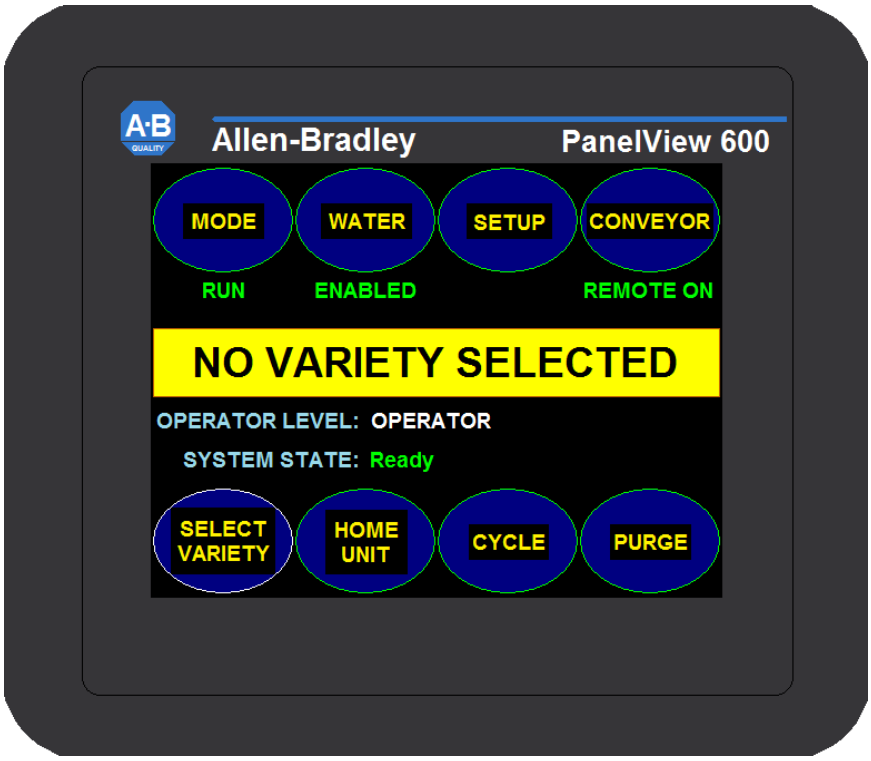


Fig. 3-2 Operator Interface

This touch screen operator interface is where variety setups and parameters will be adjusted, and any error messages will be displayed.

3.0 OPERATION PROCEDURES cont'd.

3.4 Main Screen

Fig. 3-3 Main Screen

Function	Description
"MODE"	This button toggles the unit between "RUN" and "STANDBY" modes. When in the "STANDBY" mode the pan sensor is disabled, allowing pans to travel through the unit without the unit actuating.
"WATER"	This button toggles the water solenoid valve(s) between "ENABLED" and "OFF" status. When in the "OFF" status, the pan sensor still triggers the manifold carriage, but no water is applied.
"SETUP"	This button signals the display to advance to the variety setup screens. NOTE: These screens are password protected.
"CONVEYOR"	This button toggles between "OFF", "ON" and "REMOTE" if equipped with a Burford® conveyor. To control the conveyor from an external signal the "REMOTE" mode should be chosen. The status indicator will scroll through the different options as the button is depressed. The indicator below the button shows the current status. If "REMOTE" mode is chosen, after a few seconds the display message will change to indicate the status of the external signal. "REMOTE ON" indicates the external signal is on and the conveyor is running. "REMOTE OFF" indicates that the external signal is off.
"SELECT VARIETY"	This button instructs the display to advance to the variety selection screen.
"HOME UNIT"	This button instructs the unit to verify position by moving to the "HOME" position.
"CYCLE"	This button instructs the unit to complete one splitting cycle for the variety selected.
"PURGE"	This button instructs the unit to actuate the splitter nozzles as long as the "PURGE" button is being touched. Used to remove air from the fluid lines.

3.0 OPERATION PROCEDURES cont'd.

3.4 Main Screen cont'd.

Function	Description
STATUS DISPLAY	Displays messages concerning machine operation: "NO VARIETY SELECTED": Indicates the unit is waiting for input from the operator. "HOMING": Indicates the unit is performing a homing sequence. "HOME CYCLE COMPLETE": Indicates the unit has completed a homing sequence. "VARIETY MUST BE SELECTED BEFORE ENTERING SETUP": Indicates someone attempted to enter the "SETUP" function without designating a variety. "CUSTOMER PROVIDED VARIETY NAME": Indicates a variety has been selected and the unit is waiting for additional input.
OPERATOR LEVEL	"OPERATOR" level is the default. This level allows normal machine operation. "MAINTENANCE" level is password protected. This level allows access to the variety setup screens. To activate "MAINTENANCE" level, press the "SETUP" button.
SYSTEM STATE	Displays messages concerning machine status: "INIT": Indicates the servo drive unit is performing the initializing sequence. Occurs during initial power-up. "DRIVE START": Indicates the servo drive unit is performing the drive enable sequence. Occurs during initial power-up. "START HOME": Indicates the servo drive unit is initializing the "HOME" sequence. Occurs during initial power-up. "WAIT FOR HOME": Indicates the servo drive unit is waiting for signal indicating the carriage has activated the "HOME" sensor. "SET POSITION": Indicates the servo drive unit is moving the carriage to the primary home position. "SYSTEM OK": Indicates the servo drive unit has completed its system checks and initial start-up sequences, but no variety has been selected. "SETUP": Indicates a variety has been selected and the unit is loading the variety information and moving to the variety's "STARTING POSITION". "READY": Indicates the servo drive unit has completed its system checks and initial start-up sequences and a variety has been selected. "CYCLE": Is displayed after the "CYCLE" button has been activated and the carriage is performing the displayed variety sequence. "DRIVE PROBLEM": Indicates an issue with the servo drive unit. An error code may be displayed on the drive itself. "RESET": Indicates the servo drive unit has detected an error and unit is conducting an auto reset.

3.0 OPERATION PROCEDURES cont'd.

3.5 Main Setup Screen

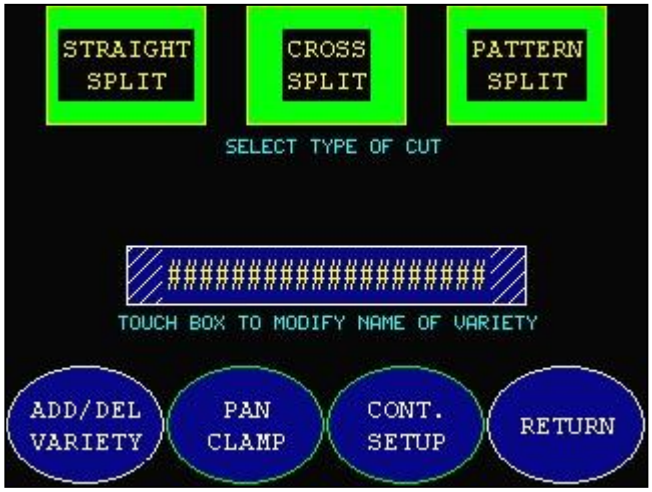


Fig. 3-4 Main Setup Screen

Function	Description
"STRAIGHT SPLIT"	Touch this box to advance to the straight split screen Section 3.6.
"CROSS SPLIT"	Touch this box to advance to the cross split screen Section 3.7.
"PATTERN SPLIT"	Touch this box to advance to the pattern split screen Section 3.8.
"ADD/DEL VARIETY"	This button advances the display to the screen for adding or deleting varieties.
"PAN CLAMP"	This button advances the display to the "PAN CLAMP" setup screen.
"CONT. SETUP"	This button advances the display to the Setup Screen for the selected split type.
"RETURN"	Returns the operator display to the previous screen.

3.0 OPERATION PROCEDURES cont'd.

3.6 Straight Split Setup Screen

Fig. 3-5 Straight Split Setup Screen

Function	Description
"DELAY ON"	This value is the amount of time (milliseconds) the unit waits from the pan sensor detecting the leading edge of the pan to when the splitter manifold begins its split sequence. Used to fine tune the position of the splits on the dough pieces.
"DELAY OFF"	This value is the amount of time (milliseconds) the splitter manifold continues to split dough pieces after the pan has cleared the pan sensor. Used to allow the entire dough piece to be split.
"RETURN"	Returns the operator display to the "SETUP" screen.

3.0 OPERATION PROCEDURES cont'd.

3.7 Cross Split Setup Screen

Fig. 3-6 Cross Split Setup Screen

Function	Description
"DELAY TO START OF MOVE"	This value is the amount of time (milliseconds) the unit waits from the pan sensor detecting the leading edge of the pan to when the splitter manifold begins its move sequence. Used to allow the pan to come to rest against the pan stop before beginning the split sequence. Range: 0 – 9.999 seconds.
"MOVE TO POSITION"	This value is the distance the splitter manifold will move before coming to a stop. Typically, this value is slightly larger than the length of the dough piece. Range: 0 – 13.00 counts.
"VELOCITY OF MOVE"	This value is the speed which the splitter manifold will reach while performing this "MOVE TO POSITION" machine cycle. Range: 0 – 190 rpm.
"SPLIT ON THIS MOVE"	Use to select whether or not to split the dough during this "MOVE TO POSITION" machine cycle.
"ACCEL /DECEL OF MOVE"	This value determines the speed rate the splitter manifold will obtain the set velocity (accel) and come to a stop (decel) during one "MOVE TO POSITION" machine cycle. Range: 0 – 200.
"SPLIT WINDOW"	Touch the box on the left to enter the position when the splitter valves will begin to operate. Touch the box on the right to enter the position when the splitter valves will stop water flow. These values determine the length of the split. Range: 0 – 13.00 counts.
"NOT LAST"	Not applicable for cross split varieties. Cross splitting is one move only.
"LAST STEP"	Not applicable for cross split varieties. Cross splitting is one move only.
"PREVIOUS"	Not applicable for cross split varieties. Cross splitting is one move only.
"NEXT"	Not applicable for cross split varieties. Cross splitting is one move only.
"SHOW LAST"	Not applicable for cross split varieties. Cross splitting is one move only.
"RETURN"	Returns the operator display to the previous screen.

3.0 OPERATION PROCEDURES cont'd.

3.8 Pattern Split Setup Screen

Fig. 3-7 Pattern Split Setup Screen

Function	Description
"DELAY TO START OF MOVE"	This value is the amount of time (milliseconds) the unit waits from the pan sensor detecting the leading edge of the pan to when the splitter manifold begins its move sequence (for "MOVE 1" only). On subsequent "MOVE" screens (2 thru 20), this value determines the amount of time the splitter valves are "OFF"; allowing the next row of dough pieces to move under the splitter manifold. Used to fine-tune the location of the splits on the dough piece. Range: 0 – 9.999 seconds.
"MOVE TO POSITION"	This value is the distance the splitter manifold will move before coming to a stop. Typically, this value is slightly larger than the length of the dough piece. Range: 0 – 13.00 counts.
"VELOCITY OF MOVE"	This value is the speed which the splitter manifold will reach while performing this "MOVE TO POSITION" machine cycle. Range: 0 – 190 rpm.
"SPLIT ON THIS MOVE"	Use to select whether or not to split the dough during this "MOVE TO POSITION" machine cycle.
"ACCEL /DECEL OF MOVE"	This value determines the speed rate the splitter manifold will obtain the set velocity (accel) and come to a stop (decel) during one "MOVE TO POSITION" machine cycle. Range: 0 – 200.
"SPLIT WINDOW"	Touch the box on the left to enter the amount of time after the splitter manifold begins to move that the splitter valves will begin to operate. Touch the box on the right to enter the amount of time after the splitter manifold begins to move that the splitter valves will stop water flow. These values determine the length of the split. Range: 0 – 13.00 seconds.
"NOT LAST"	Touch to indicate that this "MOVE" is an intermediate step to accomplish the selected variety.
"LAST STEP"	Touch to indicate that this "MOVE" is the final operation to complete the selected variety.
"PREVIOUS"	Scrolls to the previous "MOVE" screen.
"NEXT"	Scrolls to the next "MOVE" screen. "NOT LAST" must be selected before the screen will increment to the next "MOVE". A pattern split variety may have up to 20 "MOVE" screens.
"SHOW LAST"	When touched will immediately display the "MOVE" screen in which the "LAST STEP" has been selected.
"RETURN"	Returns the operator display to the previous screen.

3.0 OPERATION PROCEDURES cont'd.

3.9 Creating A New Straight Split Variety

1. From the "MAIN" screen, touch "SELECT VARIETY".

2. Use the UP / DOWN arrows to highlight a variety named "NOT USED", then touch "ACCEPT SELECTION".

3. Toggle the unit to "STANDBY" mode. Touch "SETUP" and enter password to access the variety setup screens.

Note: The following screens are password protected to prevent inadvertent and/or unauthorized changes to variety set-up information.

4. Change the name of the "Not Used" variety as desired by following screen directions. Select type of cut by touching "STRAIGHT SPLIT". Touch "ADD/DEL VARIETY" to advance to the next screen.

Fig. 3-8 Creating A Straight Split Variety

3.0 OPERATION PROCEDURES cont'd.

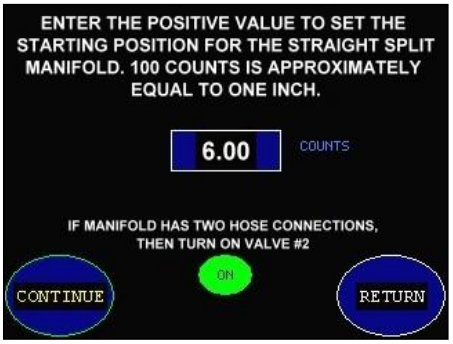
3.9 Creating A New Straight Split Variety cont'd.

5. Touch the box in the lower left hand corner to add the selected variety. Touch "RETURN" to advance to the previous screen.

6. Touch "CONT. SETUP" to advance to the next screen.

7. This value is used to center the spray nozzles over the pan cups. If the manifold used for this variety utilizes both water supply hoses then verify turn "ON" valve number 2 using the ON/OFF button in the lower portion of the screen. Once satisfied with the settings touch the "CONTINUE" button to advance to the next screen.

Caution: Once a value is entered and the "RETURN" key is touched on the data entry screen (not shown) the unit will immediately begin to move to "HOME" position and then stop at the position entered.



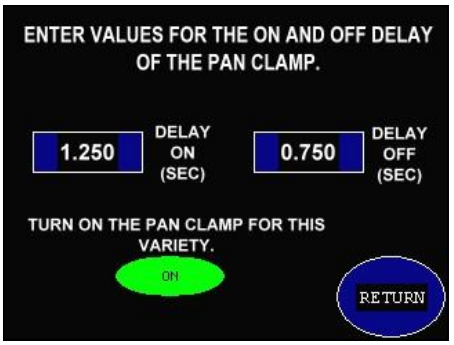
8. The "DELAY ON" setting is the time to delay between the pan triggering the pan sensor and turning on the water spray valves. The "DELAY OFF" setting is the time after the pan leaves the sensor until the valves turn off. Adjust these times such that the valves are "ON" while the pan is beneath the nozzles. Once values are entered, touch "RETURN".

3.0 OPERATION PROCEDURES cont'd.

3.9 Creating A New Straight Split Variety cont'd.

9. If equipped with a "PAN CLAMP". Touch "PAN CLAMP" to advance to the screen shown in step 10.

10. The "DELAY ON" setting is the time the clamp is actuated and holding the next pan. The "DELAY OFF" setting is the time the clamp is allowing pan(s) to advance toward the split area.



11. Touch "RETURN" to exit setup and display the "MAIN" screen.

12. Verify screen settings. "CYCLE" the unit to verify machine operation. Toggle the unit to "RUN" mode and run a test pan to confirm machine operation.

Note:	The Operator Level will return to "OPERATOR" after 5 minutes have passed without any setup screen activity.

3.0 OPERATION PROCEDURES cont'd.

3.10 Creating A New Cross Split Variety

1. From the "MAIN" screen, touch "SELECT VARIETY".

2. Use the UP / DOWN arrows to highlight a variety named "NOT USED", then touch "ACCEPT SELECTION".

3. Toggle the unit to "STANDBY" mode. Touch "SETUP" and enter password to access the variety setup screens.

> **Note:** The following screens are password protected to prevent inadvertent and/or unauthorized changes to variety set-up information.

4. Change the name of the "Not Used" variety as desired by following screen directions. Select type of cut by touching "CROSS SPLIT". Touch "ADD/DEL VARIETY" to advance to the next screen.

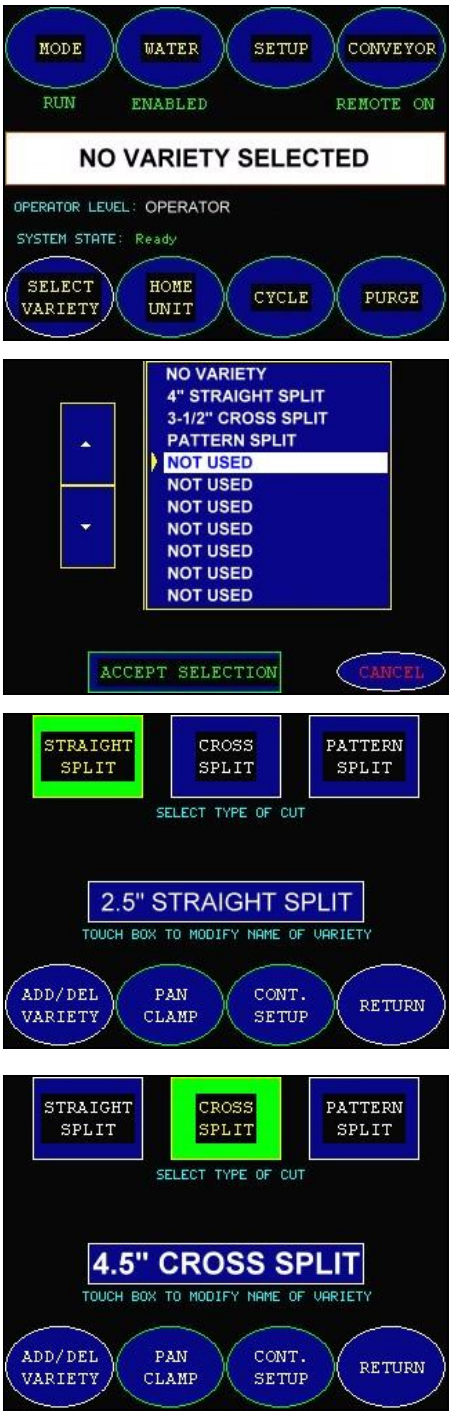


Fig. 3-9 Creating A Cross Split Variety

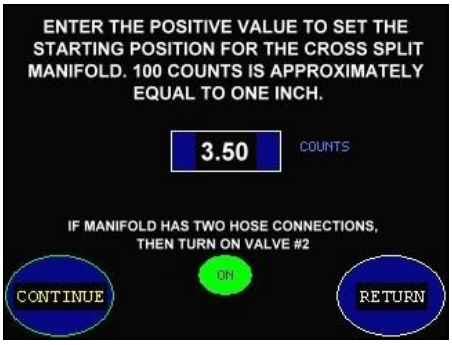
3.0 OPERATION PROCEDURES cont'd.

3.10 Creating A New Cross Split Variety cont'd.

5. Touch the box in the lower left hand corner to add the selected variety. Touch "RETURN" to advance to the previous screen.

6. Touch "CONT. SETUP" to advance to the next screen.

7. This value is used to provide the starting point for the nozzles. The value shown, in example at right, will move the manifold approximately 3.5" from the machine's primary "HOME" position. Enter a value that will move the nozzles directly over the leading edge of the pan cups (in the direction of manifold travel).



Caution: Once a value is entered and the "RETURN" key is touched on the data entry screen (not shown) the unit will <u>immediately</u> begin to move to "HOME" position and then stop at the position entered.

8. The top value provides a delay to allow the dough piece to move under the splitter manifold. The bottom value keeps the pan stop down for the time entered once the splitting cycle is complete, allowing the pan to clear the pan stop before it rises to catch the next pan.

3.0 OPERATION PROCEDURES cont'd.

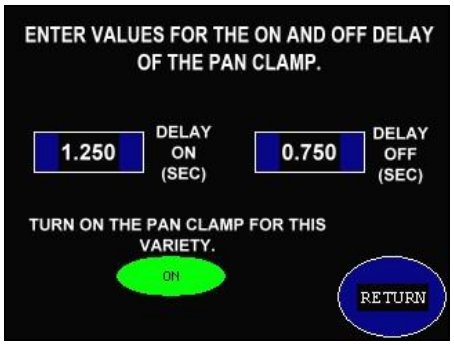
3.10 Creating A New Cross Split Variety cont'd.

9. Touch the desired parameter to enter parameter values. Once values are entered touch "RETURN".

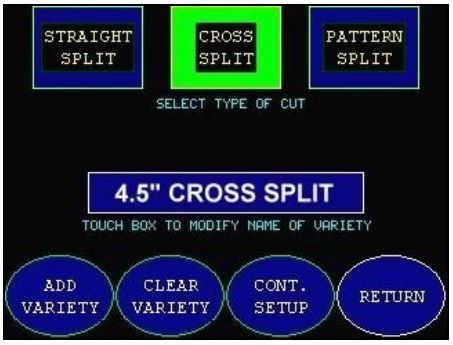
Note:	The "CROSS" split consists of only one "MOVE".

10. If equipped with a "PAN CLAMP". Touch "PAN CLAMP" to advance to the screen shown in step 11.

11. The "DELAY ON" setting is the time the clamp is actuated and holding the next pan. The "DELAY OFF" setting is the time the clamp is allowing pan(s) to advance toward the split area.



12. Touch "RETURN" to exit setup and display the "MAIN" screen.



3.0 OPERATION PROCEDURES cont'd.

3.10 Creating A New Cross Split Variety cont'd.

13. Verify screen settings. "CYCLE" the unit to verify machine operation. Toggle the unit to "RUN" mode and run a test pan to confirm machine operation.

Note:	The Operator Level will return to "OPERATOR" after 5 minutes have passed without any setup screen activity.

3.0 OPERATION PROCEDURES cont'd.

3.11 Creating A New Pattern Split Variety

1. From the "MAIN" screen, touch "SELECT VARIETY".

2. Use the UP / DOWN arrows to highlight a variety named "NOT USED", then touch "ACCEPT SELECTION".

3. Toggle the unit to "STANDBY" mode. Touch "SETUP" and enter password to access the variety setup screens.

Note: The following screens are password protected to prevent inadvertent and/or unauthorized changes to variety set-up information.

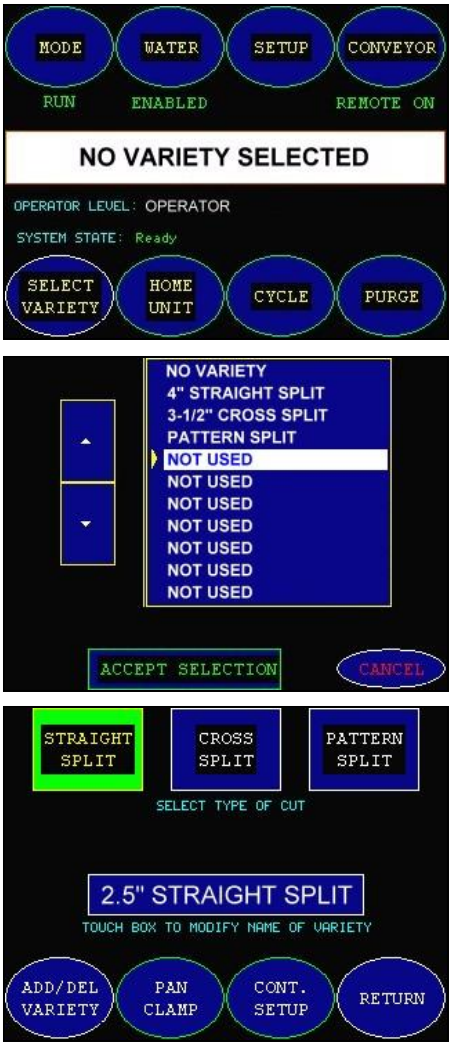


Fig. 3-10 Creating A Pattern Split Variety

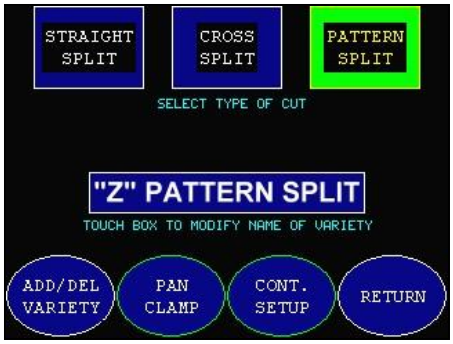
3.0 OPERATION PROCEDURES cont'd.

3.11 Creating A New Pattern Split Variety cont'd.

4. Change the name of the "Not Used" variety as desired by following screen directions. Select type of cut by touching "PATTERN SPLIT". Touch "ADD/DEL VARIETY" to advance to the next screen.

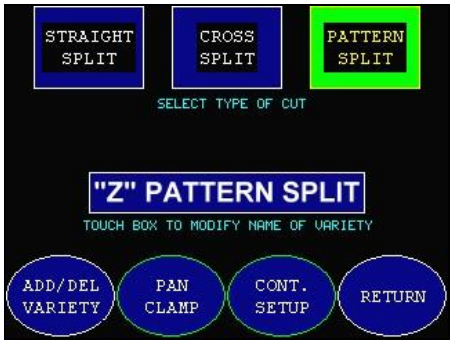
5. Touch the box in the lower left hand corner to add the selected variety. Touch "RETURN" to advance to the previous screen.

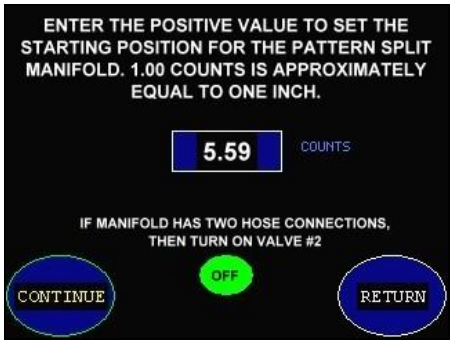
6. Touch "CONT. SETUP" to advance to the next screen.



Note: The values in the following screens are for instructional purposes only. Your values may be different.

7. This value is used to provide the starting point for the nozzles. The value shown will move the manifold approximately 5.59" from the unit's primary "HOME" position. This value should move the nozzles directly over the leading edge of the pan cups (in the direction of manifold travel). Touch "CONTINUE" to advance to next screen.





Caution: Once a value is entered and the "RETURN" key is touched on the data entry screen (not shown) the unit will <u>immediately</u> begin to move to "HOME" position and then stop at the position entered.

3.0 OPERATION PROCEDURES cont'd.

3.11 Creating A New Pattern Split Variety cont'd.

8. Build the first step of six for the desired pattern. The "MOVE TO POSITION" value is the distance the manifold will move from the position entered in Step 5. This value plus the value entered in Step 5 cannot exceed 13.00. The "SPLIT WINDOW" is the length of the split. In the screen shown the split will begin after 0.220 seconds and stop 0.340 seconds after manifold begins to move. Highlight "NOT LAST", and then touch "NEXT" to advance to "MOVE 2".

Note:	A "PATTERN" split may consist of up to 20 moves.

9. Build the second step of six for the desired pattern. The "MOVE TO POSITION" value moves the manifold back to the original position. The "SPLIT WINDOW" is still 0.120 seconds long, but the overall time has been increased to correctly position the splits on the carriage's return stroke. The "DELAY TO START OF MOVE" has been changed to 0.031 seconds to turn off the spray nozzles long enough for the next row of dough pieces to move under the spray nozzles. Highlight "NOT LAST", and then touch "NEXT" to advance to "MOVE 3".

3.0 OPERATION PROCEDURES cont'd.

3.11 Creating A New Pattern Split Variety cont'd.

10. Build the third step of six for the desired pattern. This move is similar to step one, moving the manifold back out across the pan. Notice that the "DELAY TO START MOVE" remains at 0.031 seconds and the "SPLIT WINDOW" is still 0.120 seconds long, but the overall time continues to increase. Highlight "NOT LAST", and then touch "NEXT" to advance to "MOVE 4".

11. Build the fourth step of six for the desired pattern. This move is similar to step two, moving the manifold back to the starting position. All other values remain the same, except the overall time continues to increase for the "SPLIT WINDOW". Highlight "NOT LAST", and then touch "NEXT" to advance to "MOVE 5".

12. Build the fifth step of six for the desired pattern. This move is similar to steps one and three, moving the manifold back out across the pan. All other values remain the same, except the overall time continues to increase for the "SPLIT WINDOW". Highlight "NOT LAST", and then touch "NEXT" to advance to "MOVE 6".

13. Build the last step of six for the desired pattern. This move is similar to steps two and four, moving the manifold back to the original position. Notice that the entire operation took 1.390 seconds. Highlight "LAST STEP", and then touch "RETURN" to the main "SETUP" screen.

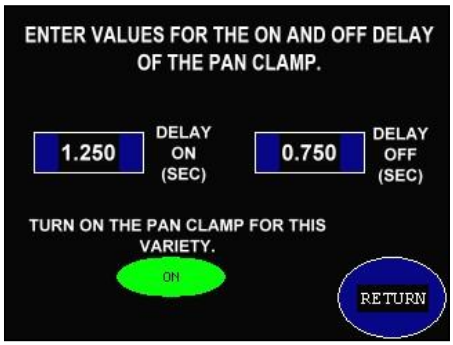
Note:	If the conveyor speed changes, then all values for these six "MOVES" must be changed.

3.0 OPERATION PROCEDURES cont'd.

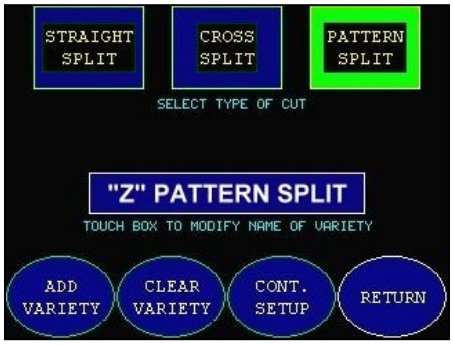
3.11 Creating A New Pattern Split Variety cont'd.

14. If equipped with a "PAN CLAMP". Touch "PAN CLAMP" to advance to the screen shown in step 15.

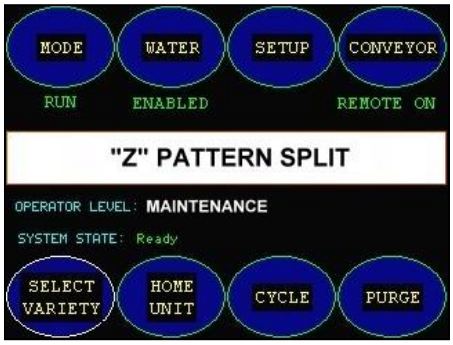
15. The "DELAY ON" setting is the time the clamp is actuated and holding the next pan. The "DELAY OFF" setting is the time the clamp is allowing pan(s) to advance toward the split area.



16. Touch "RETURN" to exit setup and display the "MAIN" screen.



17. Verify screen settings. "CYCLE" the unit to verify machine operation. Toggle the unit to "RUN" mode and run a test pan to confirm machine operation.



Note:	The Operator Level will return to "OPERATOR" after 5 minutes have passed without any setup screen activity.

3.0 OPERATION PROCEDURES cont'd.

3.12 Deleting An Existing Variety

1. From the "MAIN" screen, touch "SELECT VARIETY".

2. Use the UP / DOWN arrows to highlight the variety that you want to delete, then touch "ACCEPT SELECTION".

3. Touch "SETUP" and enter password to access the variety setup screens.

> **Note:** The following screens are password protected to prevent inadvertent and/or unauthorized changes to variety set-up information.

4. Verify the displayed variety name is the desired variety to delete. Touch "ADD/DEL VARIETY" to advance to the next screen.

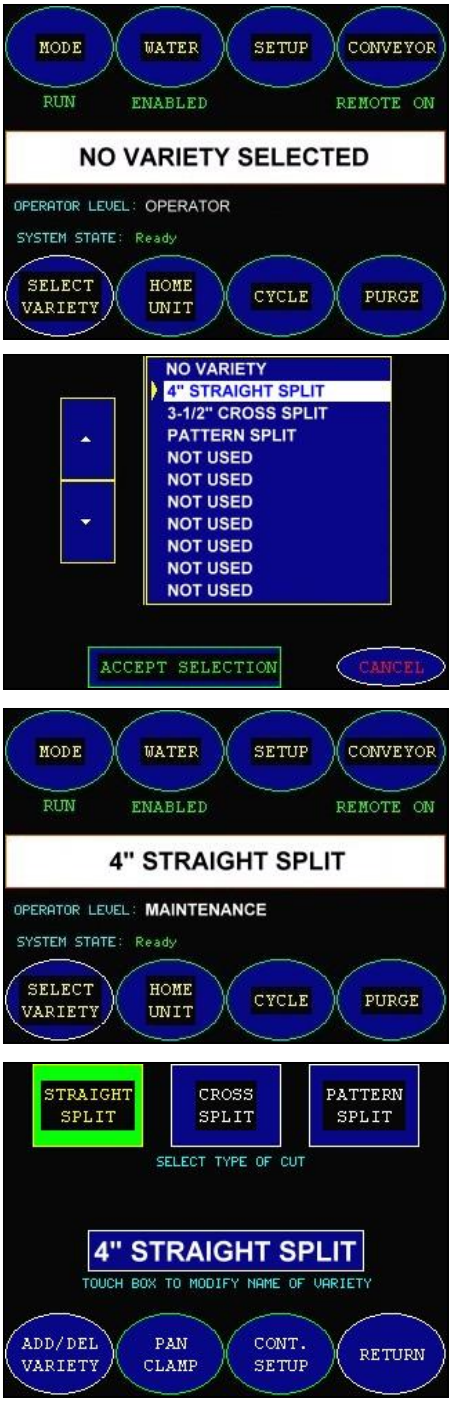


Fig. 3-11 Deleting An Existing Variety

3.0 OPERATION PROCEDURES cont'd.

3.12 Deleting An Existing Variety cont'd.

5. Touch the "Press Again To Confirm…" box to delete the selected variety.

6. Touch "RETURN" to exit to the previous screen.

3.0 OPERATION PROCEDURES cont'd.

3.13 Daily Startup Procedure

1. Ensure pump cart holding tank is full of water.

2. Turn "ON" the main disconnect and allow the display to boot up. This may take several minutes. Pull the "STOP" button to the "START" position.

3. Touch "PRESS TO START" on the operator display.

4. Verify the unit is in "RUN" mode and "WATER" has been enabled. Touch "SELECT VARIETY" to advance to screen shown in step 5.

5. Highlight the desired variety and touch "ACCEPT SELECTION".

6. Purge unit, using the "PURGE" button, until a clean stop/start of water spray is established.

7. Press "CYCLE" button to test the selected variety for correct water spray and carriage action.

8. Run test pan to ensure proper coverage.

9. Begin production.

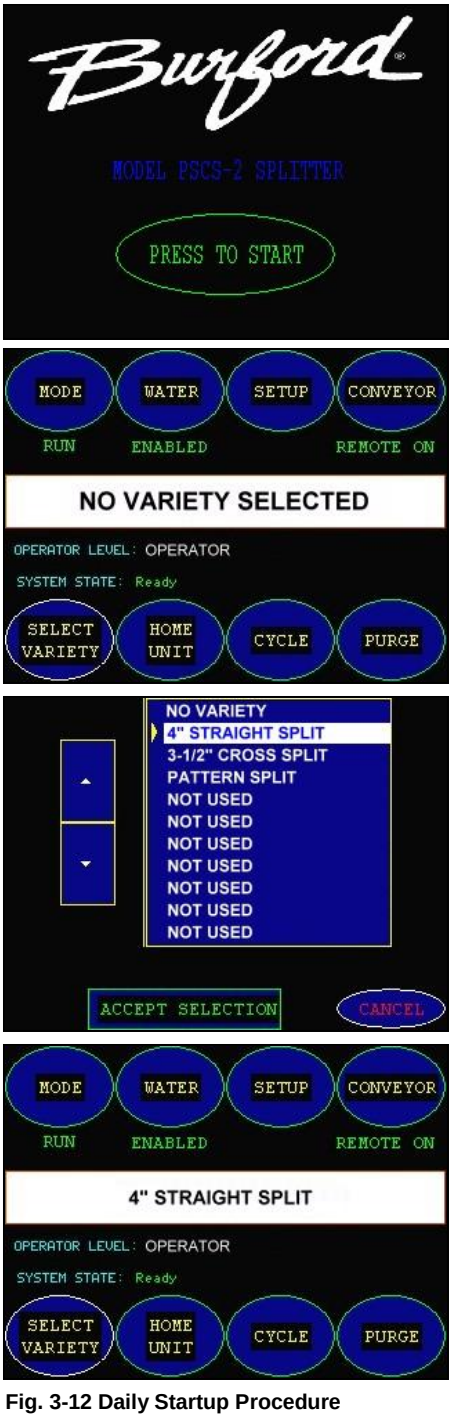
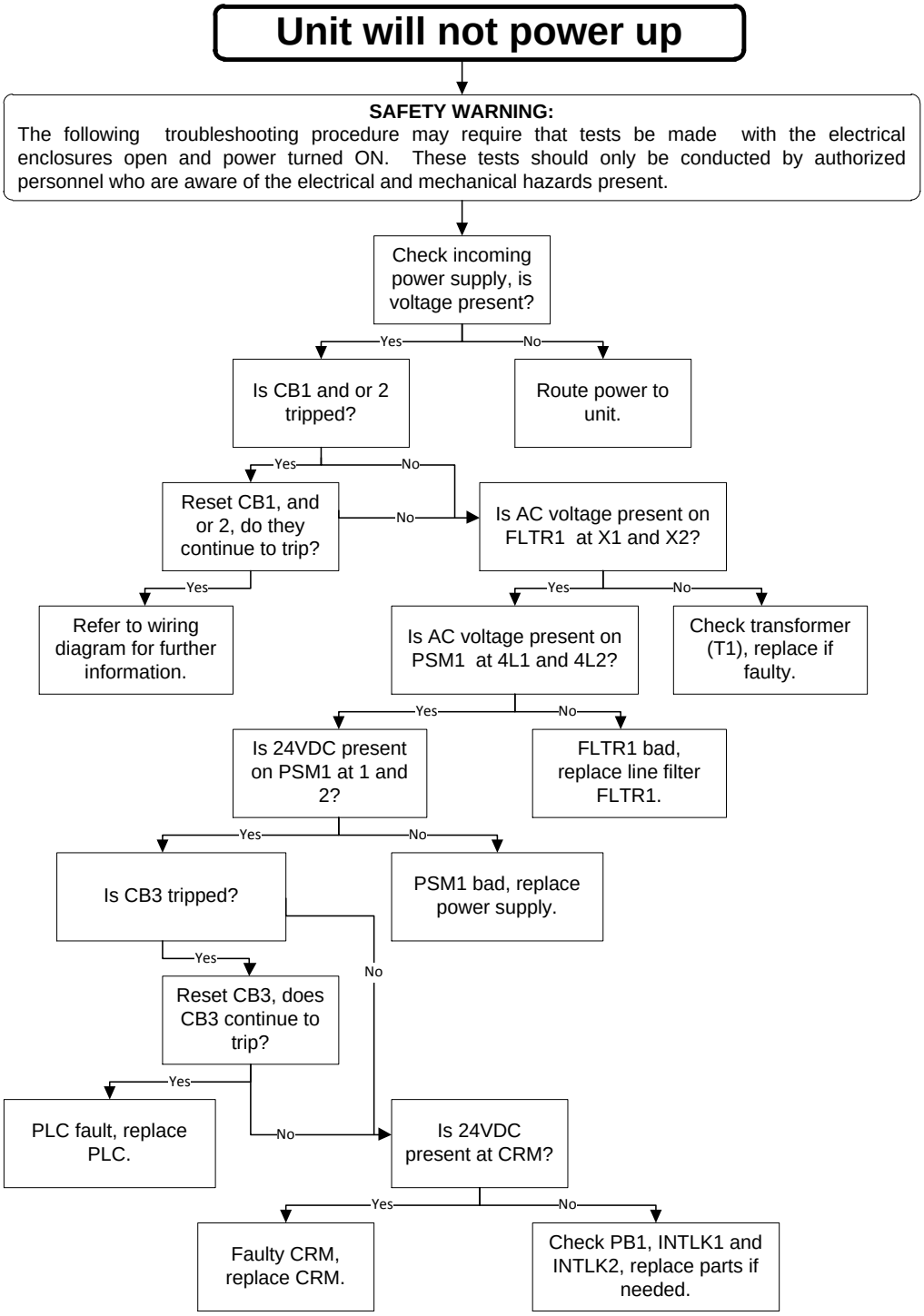


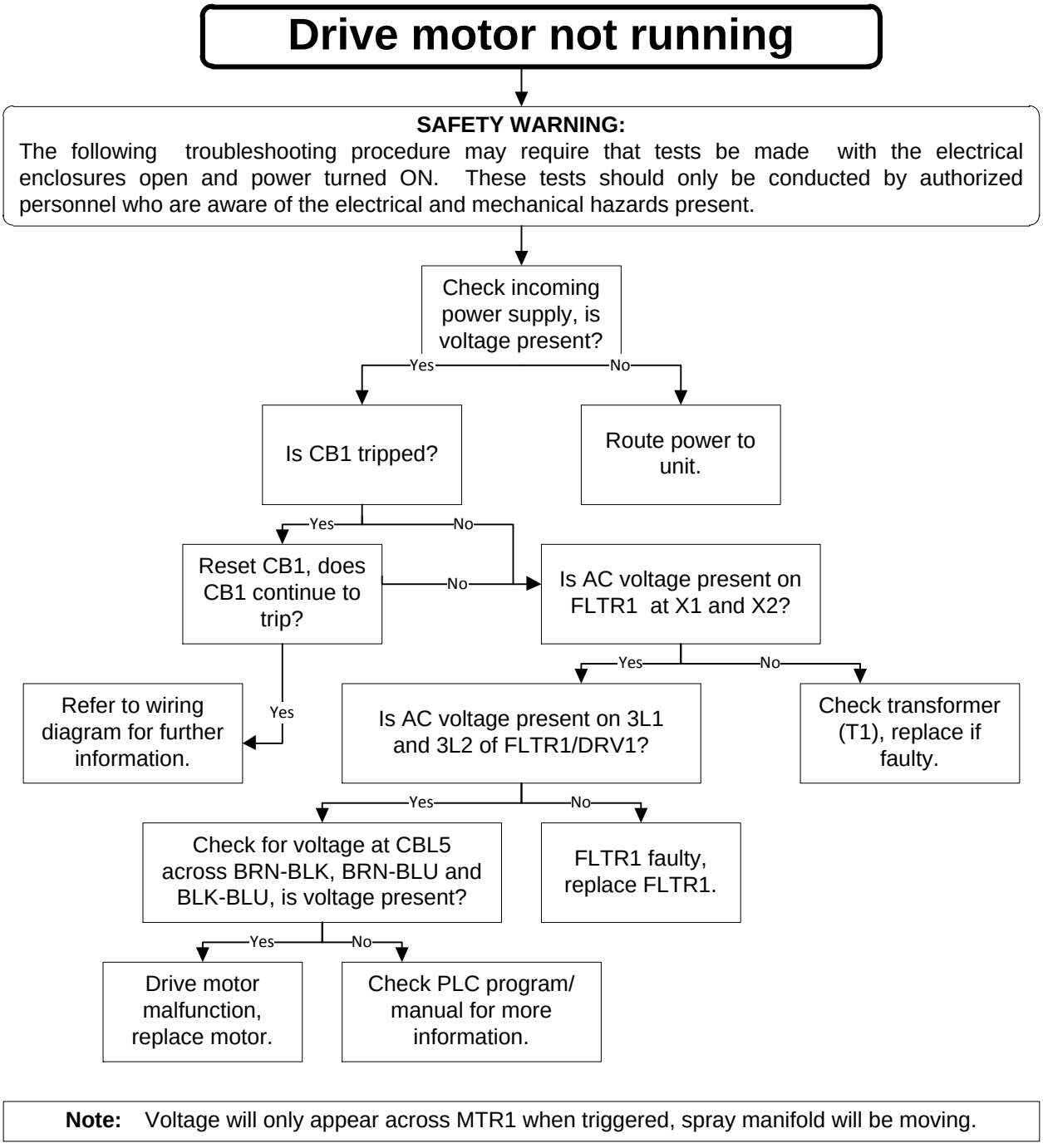
Fig. 3-12 Daily Startup Procedure

4.0 TROUBLESHOOTING

4.1 Troubleshooting Flow Charts

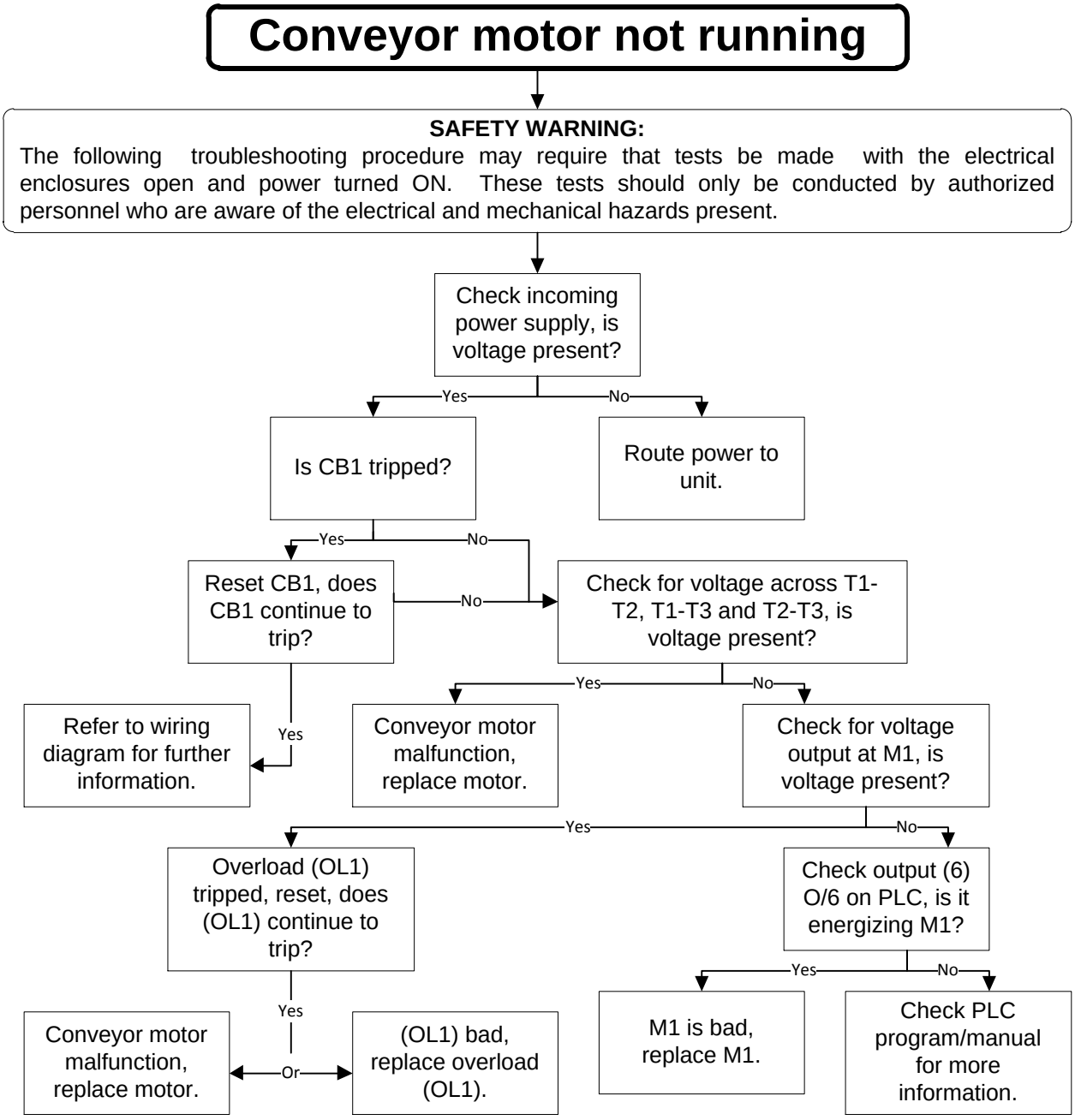


Flow Chart 4-1 Unit Will Not Power Up

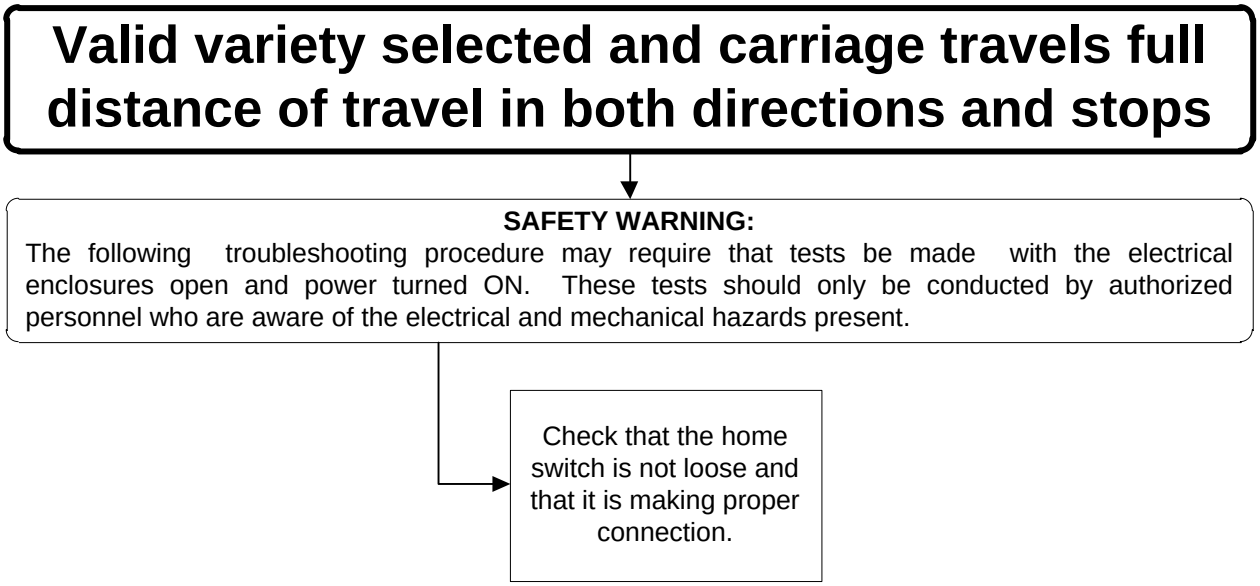


Note: Voltage will only appear across MTR1 when triggered, spray manifold will be moving.

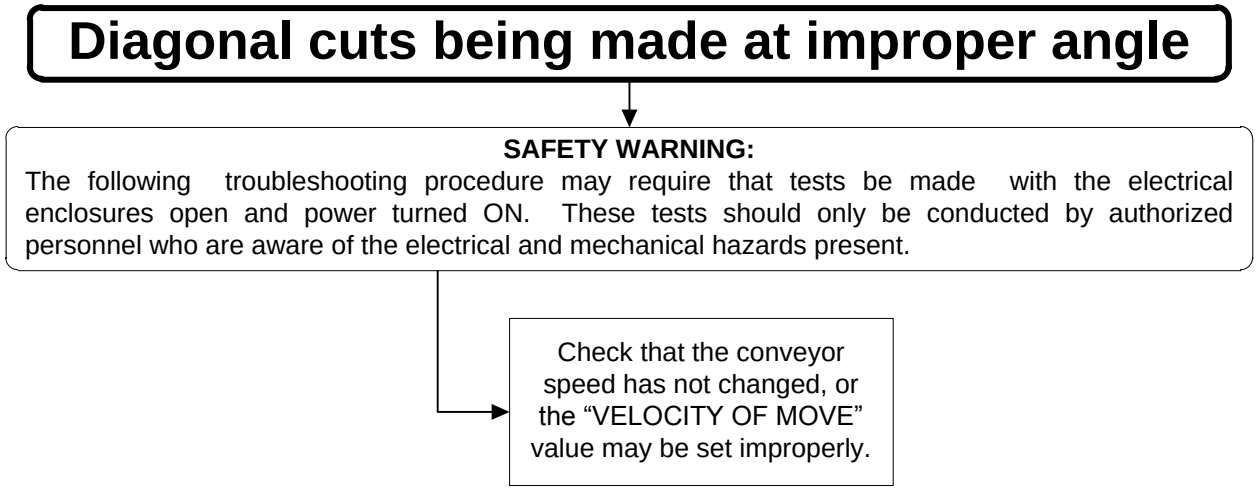
Flow Chart 4-2 Drive Motor Not Running



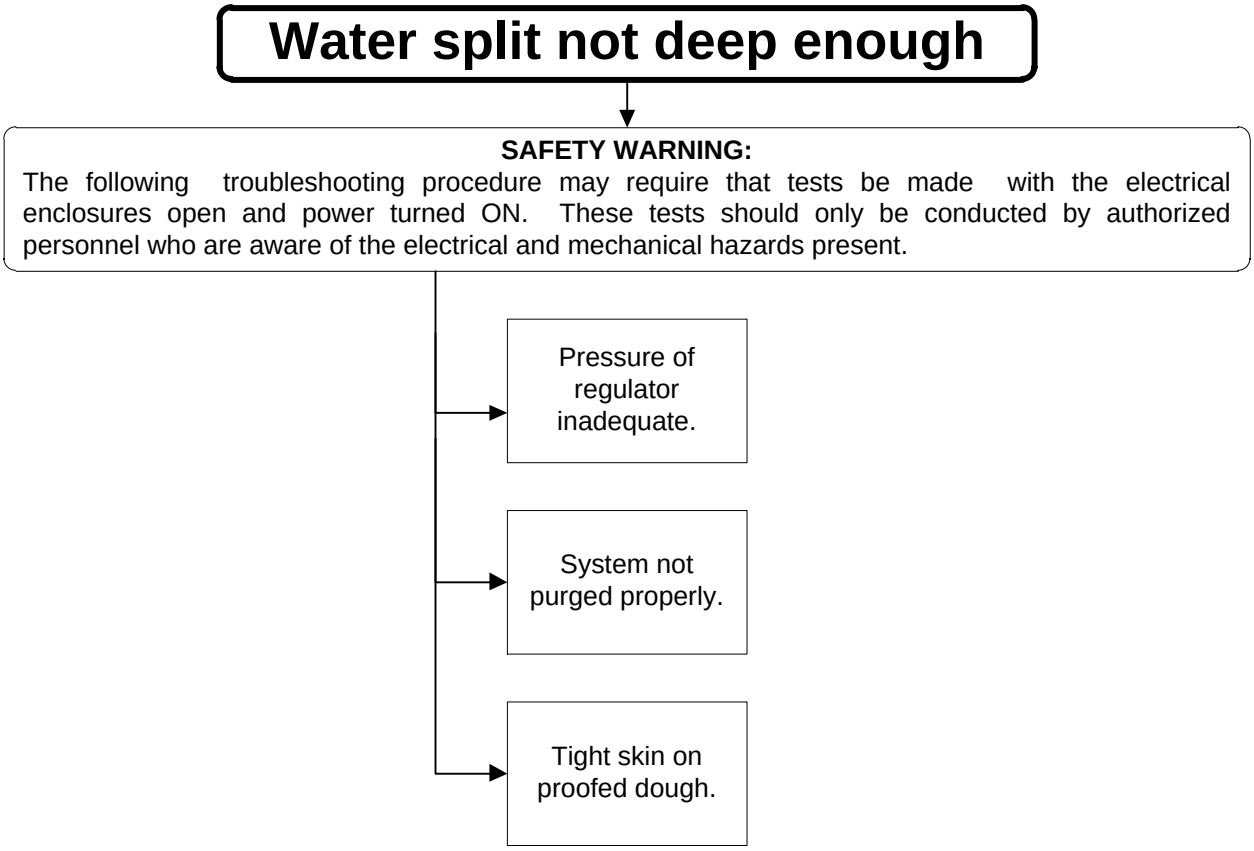
Flow Chart 4-3 Conveyor Motor Not Running



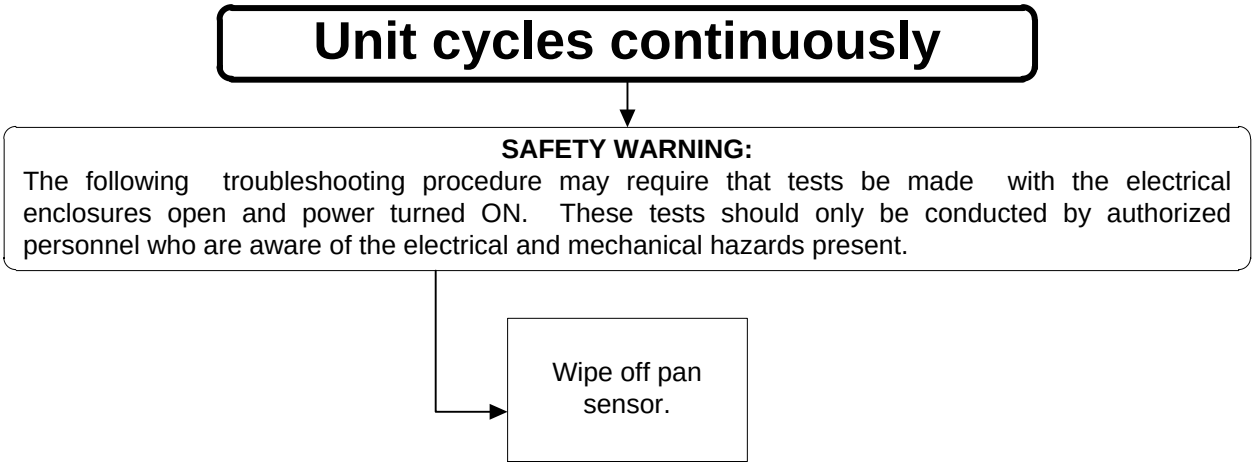
Flow Chart 4-4 Carriage Travels Both Directions And Stops



Flow Chart 4-5 Diagonal Cuts With Improper Angle



Flow Chart 4-6 Water Split Not Deep Enough



Flow Chart 4-7 Unit Cycles Continuously

4.0 TROUBLESHOOTING cont'd.

4.2 Red Fault Light

The fault light is located on top of the control cabinet. It will flash when the processor detects a fatal motor drive fault. See the supplied motor drive owner manual for additional error code information.

5.0 MAINTENANCE

5.1 Preventive Maintenance

Warning:	Do NOT use any form of high pressure or running fluid systems for cleaning or any other purpose on this unit.

We strongly recommend the following be done periodically to ensure proper performance of your Burford® Splitter:

5.1.1 Daily

1. Clean catch pans, empty catch tray (located beneath conveyor).
2. Clean conveyor chain.
3. Wipe off and clean pan sensor.
4. Wipe off frame and conveyor daily.

5.1.2 Monthly

1. Replace pump cart water filter.
2. Fill air lubricator reservoir.

5.0 MAINTENANCE cont'd.

5.2 Cleaning Recommendations

Caution:	The Burford® PS-CS Splitter has multiple sensors and electronic components that may be damaged by water. Do not subject the unit; particularly, the main electrical enclosure and operator display to direct high pressure spray.

1. Remove all catch pans and catch trays from unit and thoroughly clean at a site away from the splitter.

2. Separate the conveyor chain and clean at a site away from the splitter.

3. Use compressed air to remove dust and debris from the splitter.

4. Use a soft cloth to clean observation windows on main covers.

5. Wipe off frame and covers.

Note:	Follow your facilities Lockout/Tagout procedures before beginning any maintenance or cleaning procedures.

5.0 MAINTENANCE cont'd.

5.3 Check Screen Replacement

To change check screen, loosen and remove spray tip. Inspect screen for defects and blockages, replace as necessary.

Fig. 5-1 Check Screen Replacement

5.0 MAINTENANCE cont'd.

5.4 Pan Sensor

The pan sensor is used to signal when a pan has entered the splitter area. Once a pan is sensed, the PLC initiates the split sequence specified on the control panel. This sensor is mounted directly in line with the reflector located beneath the conveyor chain.

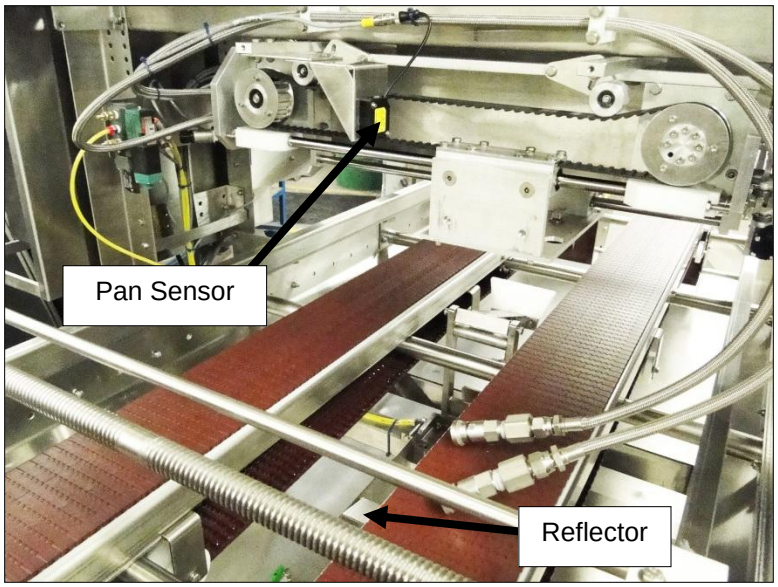


Fig. 5-2 Pan Sensor

Note:	The reflector should be mounted to the units cross beam as shown above.

5.0 MAINTENANCE cont'd.

5.5 Home And Overtravel Switches

The limit switches are responsible for signaling the unit of an overtravel condition and identify the "HOME" position of the carriage. The overtravel switches are located directly opposite of one another. They are responsible for signaling the unit when the carriage has exceeded its range of travel. The remaining switch is the home switch. This switch signals the unit to stop once the "homing" cycle is complete.

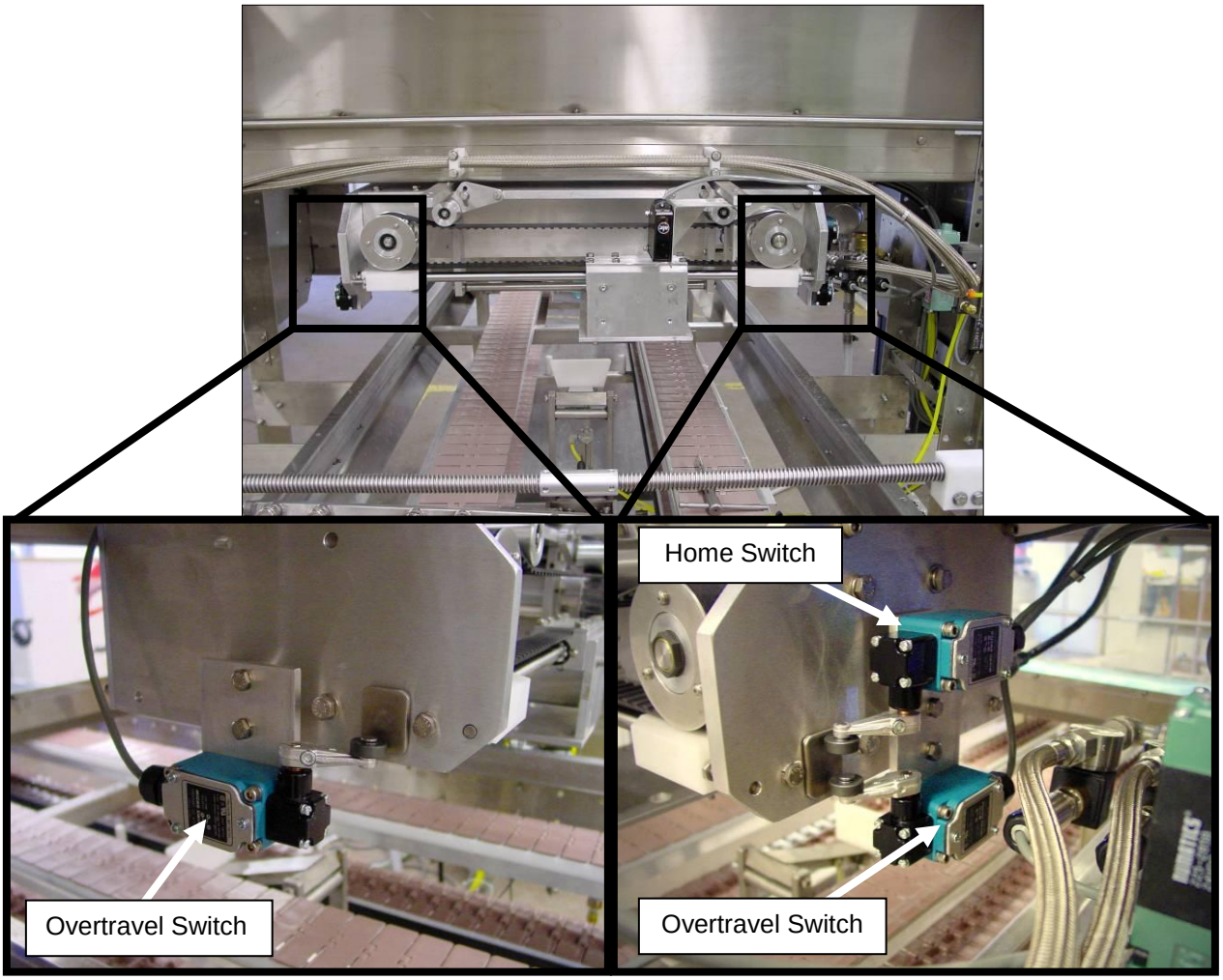


Fig. 5-3 Home And Overtravel Switches

Note:	Guard raised for clarity.

5.0 MAINTENANCE cont'd.

5.6 Pump Cart And Manifold Pressure

Pressure settings for the pump cart air pressure and the manifold fluid pressure are outlined below. Different dough will require changes in pressure settings to achieve the desired split depth. These settings are general and may differ from application to application.

Pump Cart Air Pressure:	80 psi max
Pump Cart Accumulator Pressure:	30 psi
Manifold Liquid Pressure:	30-40 psi for standard (1-23 nozzles) manifold (single supply hose).
Manifold Liquid Pressure:	40-50 psi for high volume (24-60 nozzles) manifold (dual supply hoses).

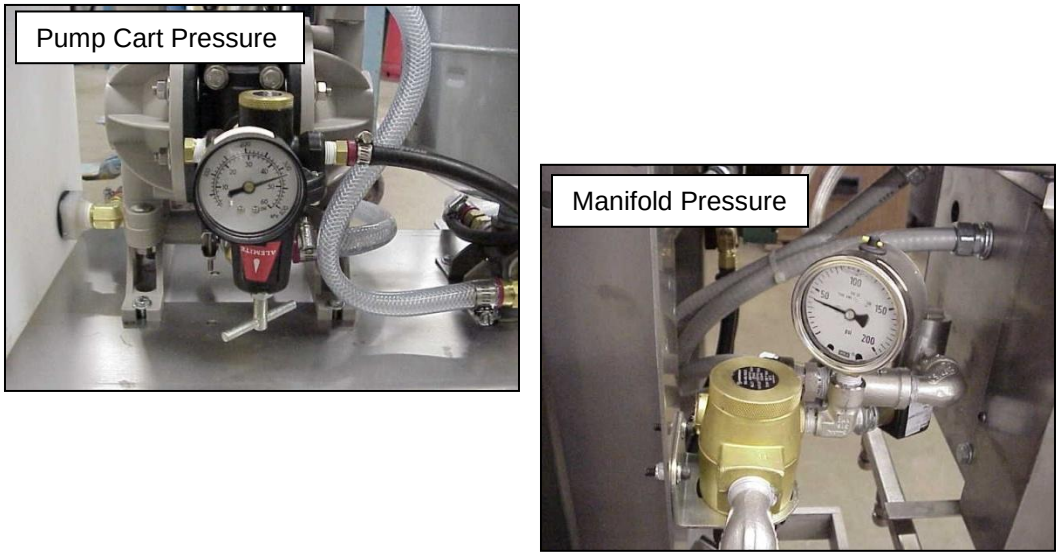


Fig. 5-4 Pump Cart And Manifold Pressure

6.0 RECOMMENDED SPARE PARTS LIST

In order to prevent valuable down time, Burford® Corp. recommends the following parts be kept in stock.

Please have the following machine information on hand before calling Burford®.

- Machine Voltage
- Model Number
- Serial Number

PART #	QTY	DESCRIPTION
103972	1	SWITCH, LIMIT
111043	1	ROLLER, LIMIT SWITCH
86355-112	1	BELT DRIVE, RWK , PSCS-36 104.50"
610421-001	2	RELAY, TERMINAL MOUNTING, 24 VDC
611640	1	MOTOR, STEPPER
611459	10	VALVE, CHECK w/STRAINER, 20 PSI
C01164	10	O-RING, .489 ID X .070 THICK
C00506	2	CAP, TIP RETAINING
C00543	2	TIP, SS TEE JET
C00579	1	FILTER, REPLACEMENT
305932	1	VALVE, SOLENOID, ¼" NPT, 24VDC

7.0 ASSEMBLY DRAWINGS AND PARTS LISTS

7.1 Carrier Frame Assembly (86355-101 “01”)

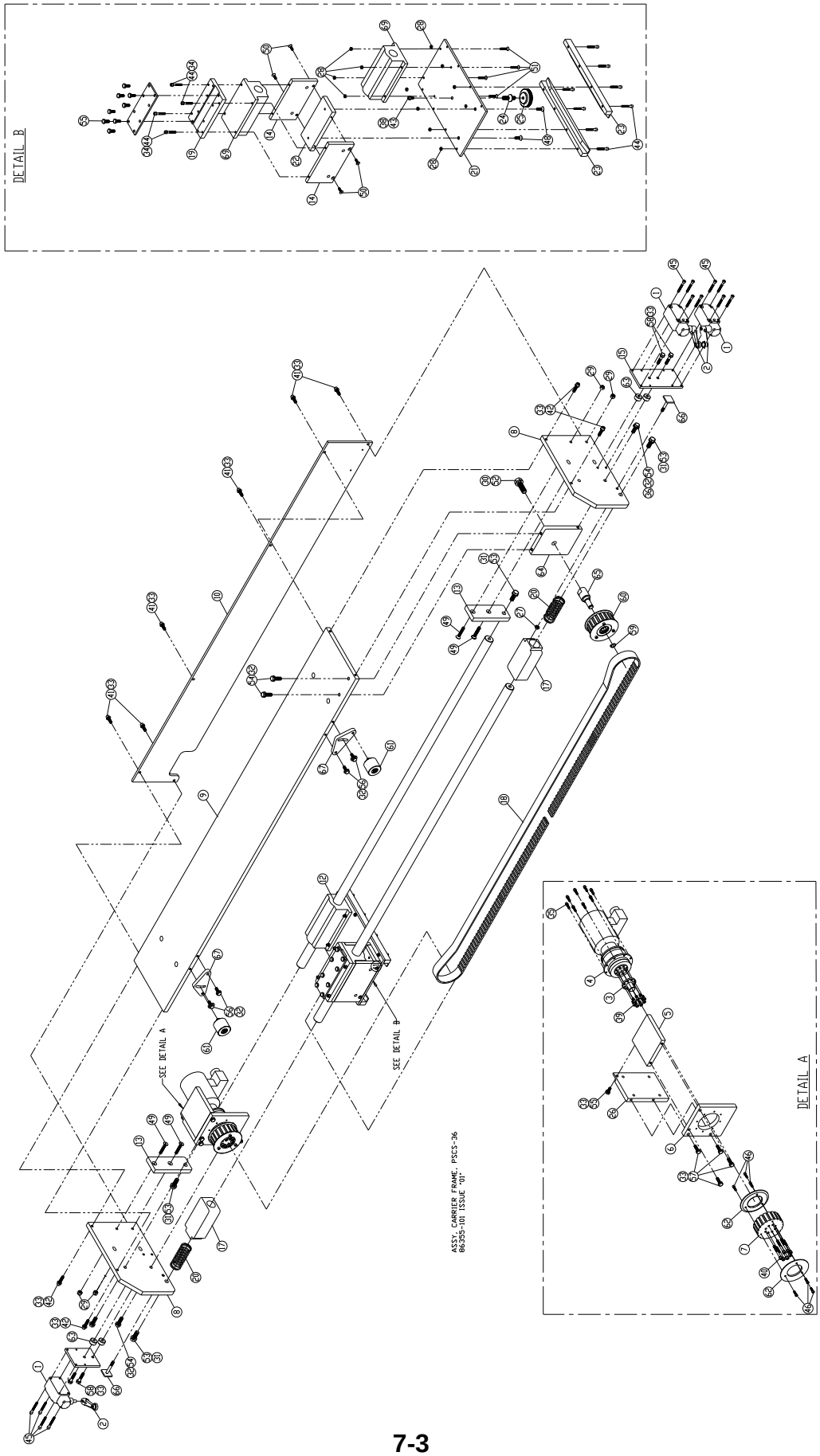
REF	PART #	QTY	DESCRIPTION
1	103972	REF	SENSOR,MICRO SWITCH
2	111043	REF	SENSOR,ACTUATOR ROLLER
3	305397	1	ADAPTER PS2 AB MOTOR
4	611640	REF	MOTOR, GEAR, 0.12kW, 230V, 194RPM, 30 TO 1
5	714481	1	PLATE, BRACE
6	714482	1	PLATE, SERVOMOTOR
7	714483	1	PULLEY,DIRECT DRIVE
8	86355-102	2	PLATE SIDE CARRIER
9	86355-103	1	PLATE, TOP CARRIER, PSCS-36
10	86355-104	1	PLATE, BACK CARRIER, PSCS-36
11	86355-105	1	SHAFT, SLIDE BEARING
12	86355-106	1	SHAFT, SLIDE BEARING REAR
13	86355-107	2	PLATE, INNER BEARING, PSCS-36
14	86355-108	2	PLATE, MANIFOLD MT, FRONT, PSCS-12
15	86355-109	1	PLATE, SWITCH MOUNT
16	86355-110	1	PLATE, SWITCH MOUNT
17	86355-111	2	STOP BLOCK,SLIDE PSCS-36
18	86355-112	1	BELT DRIVE, RWK , PSCS-36 104.50"
19	86355-114	1	PLATE, BELT CLAMP SLIDER
20	86355-115	2	SPRING 1.218 OD 1.08 ID 3" LG .085 W
21	86355-116	1	PLATE, CARRIER MANIFOLD MT PSCS-36
22	86355-117	1	PLATE BEARING MOUNT
23	86355-118	2	BAR GUIDE MANIFOLD SLIDE
24	86355-119	1	STUD MANIFOLD CLAMP SCREW
25	86355-120	1	KNOB MANIFOLD CLAMP
26	86355-151	1	PLATE, CORNER
27	955379	2	NUT HEX 1/4-20 UNC SST
28	955621	12	NUT HEX NYLOC #10-24 UNC SST
29	955661	4	NUT HEX NYLOC 1/4-20 UNC SST
30	955937	1	WASHER LOCK 1/2" SST
31	955938	4	WASHER LOCK 3/8"
32	955939	7	WASHER, LOCK 5/16" SST
33	955940	21	WASHER LOCK 1/4" SST
34	955941	11	WASHER LOCK #10 SST
35	955942	8	WASHER LOCK #8 SST

86355-101 ISSUE “01”

7.1 Carrier Frame Assembly (86355-101 “01”) cont’d.

REF	PART #	QTY	DESCRIPTION
36	955976	1	WASHER FLAT 5/16 SST
37	955977	2	WASHER FLAT 1/4" SST
38	955978	1	WASHER FLAT #10 SST
39	976410	8	SCREW SOC HD CAP M5 X 10MM
40	976445	7	SCREW SOC HD CAP M5-.8 X 45MM SST
41	978312	6	SCREW SOC HD CAP 1/4-20 X 3/4 SST
42	978316	4	SCREW SOC HD CAP 1/4-20 X 1 SST
43	978908	1	SCREW SOC HD CAP #10-24 UNC X 1/2 SST
44	978920	12	SCREW SOC HD CAP #10-24 X 1 1/4 SST
45	978924	12	SCREW SOC HD CAP #10-24 UNC X 1 1/2 SST
46	979508	6	SCREW SOC HD CAP #8-32 UNC X 1/2 SST
47	979510	8	SCREW SOC HD CAP #8-32 X 5/8 SST
48	981712	2	SCREW FLT HD SOC 1/4-20 X 3/4 SST
49	981724	8	SCREW FLT HD SOC 1/4-20 X 1 1/2 SST
50	982310	4	SCREW FLT HD SOC #10-24 X 5/8 SST
51	982316	4	SCREW FLT HD SOC #10-24 X 1 SST
52	988324	1	SCREW FIN HEX 1/2-13 X 1 1/2 SST
53	988916	4	SCREW FIN HEX 3/8-16 X 1 SST
54	989716	5	SCREW FIN HEX 5/16-18 X 1 SST
55	989910	9	SCREW FIN HEX 1/4-20 X 5/8" SST
56	989912	4	SCREW FIN HEX 1/4-20 X 3/4" SST
57	989914	4	SCREW FIN HEX 1/4-20 X 7/8 SST
58	989920	4	SCREW FIN HEX 1/4-20 X 1 1/4 SST
59	C01120	1	SNAP RING, EXTERNAL, 1/2"
60	C06035	1	ASSY, IDLER PULLEY
61	C06038	2	ASSY, BELT TENSIONER
62	C06039	2	FLANGE, PULLEY GEARBELT
63	C06093	4	SPACER,SWITCH MOUNT
64	C06097	1	IDLER, MOUNT
65	C06116	1	SHAFT, IDLER PULLEY
66	C06117	2	A/W, GUIDE PIN, STOP BLOCK, PS-2
67	C06120	2	ARM, BELT TENSIONER
68	C06124	1	PLATE, BELT CLAMP SLIDER
69	C06296	2	BEARING, LINEAR PILLOWBLOCK 1"

86355-101 ISSUE “01”


DETAIL B
SEE DETAIL A
SEE DETAIL B
DETAIL A
ASSY, CARRIER FRAME, PSCS-36
86-395-101 ISSUE "01"

7.2 Frame And Cover Assembly (86355-130 “03”)

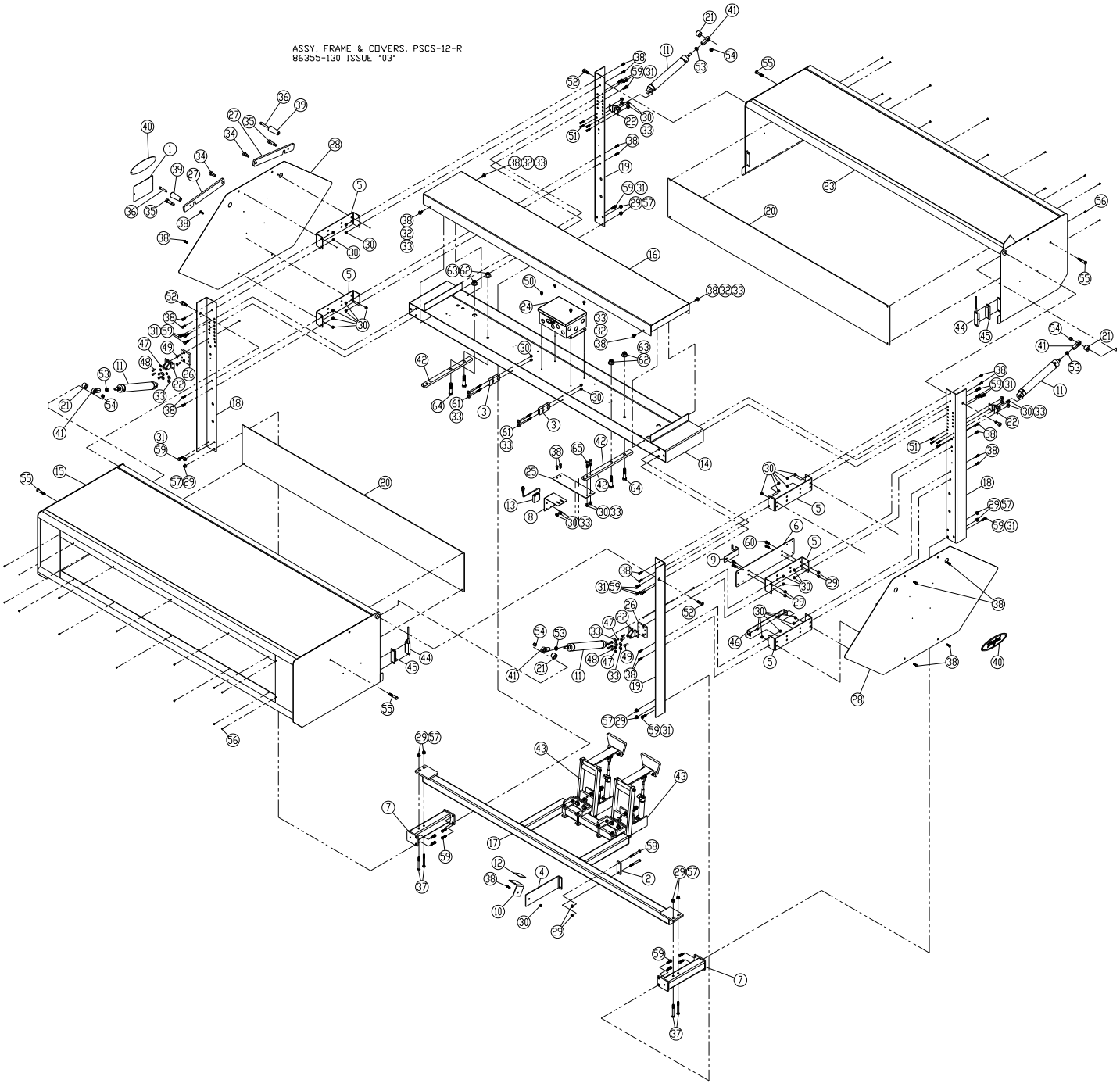
REF	PART #	QTY	DESCRIPTION
1	112643	1	SERIAL PLATE
2	300463	1	BAR, BACK-UP CLAMP, PAN STOP, CS-1
3	300494	2	HOSE RESTRAINT DUAL
4	303843	1	ANGLE, SENSOR LOWER, PSCS-12
5	303892	5	CHANNEL, ELEC BOX, MTG PSCS-12
6	303905	1	PLATE, VALVE MOUNTING, PSCS-12
7	304415	2	A/W, END SUPPORT, LWR, PSCS
8	304694	1	A/W, SENSOR MT, UPPER, PSCS-12
9	305381	1	BRACKET REG RESTRAINT PSCS-12R/L
10	305730	1	ANGLE REFLECTOR MT PS1, CS1
11	401149	4	CYLINDER, 8" x 1 1/2" TRANSFER
12	610255	1	TAPE,REFLECTOR,SENSOR 3"W
13	610797	1	SENSOR,PHOTO,RETRO-REF,10-30V,N.O/C
14	86355-121	1	A/W, MAIN CHANNEL, PSCS-36
15	86355-123	1	A/W COVER PSCS-36
16	86355-131	1	A/W, MAIN CHANNEL COVER, PSCS-36
17	86355-133	1	A/W, PAN STOP MOUNT, PSCS-36
18	86355-137	2	UPRIGHT, ANGLE, PSCS-12
19	86355-138	2	UPRIGHT, ANGLE, PSCS-12
20	86355-139	2	COVER DOOR LEXAN PSCS-36
21	86355-140	4	SPACER COVER CYLINDER MOUNT
22	86355-141	4	PIVOT BRACKET CYLINDER D-229 PAIR
23	86355-148	1	A/W COVER PSCS-36 INFEED
24	86355-158	REF	ENCLOSURE,REWORK, PSCS-36 (111094)
25	86355-300	1	PLATE, SENSOR MOUNT EXT
26	86355-301	2	ADAPTER CYLINDER MOUNT
27	86355-303	2	BAR COVER LATCH
28	86355-304	2	COVER SHIELD DOOR
29	955619	18	NUT HEX NYLOC 5/16-18 UNC SST
30	955661	43	NUT HEX NYLOC 1/4-20 UNC SST
31	955939	16	WASHER, LOCK 5/16" SST
32	955940	9	WASHER LOCK 1/4" SST
33	955977	28	WASHER FLAT 1/4" SST

86355-130 ISSUE “03”

7.2 Frame And Cover Assembly (86355-130 “03”) cont’d.

REF	PART #	QTY	DESCRIPTION
34	975208	2	SCREW SHLDR 1/2 X 1/2, 3/8-16 SST
35	975220	2	SCREW SHLDR 1/2 X 1 1/4, 3/8-16 SST
36	977728	2	SCREW SOC HD CAP 5/16-18 x 1 3/4 SST
37	989748	4	SCREW FIN HEX 5/16-18 X 3 SST
38	989912	31	SCREW FIN HEX 1/4-20 X 3/4" SST
39	A04735	2	HANDLE
40	A08049	2	NAMEPLATE,BURFORD LOGO,LARGE
41	C00128	4	BEARING, ROD END, .438 DIA.
42	C06226	2	SPACER
43	C06236-MOD	2	ASSY, PAN STOP CS1 STOP POSITION
44	C07219	REF	SWITCH, MAGNETIC, KEYED
45	C07220	REF	ACTUATOR, MAGNET
46	C07620	1	RESTRAINT-CONDUIT CSI
47	955940	8	WASHER LOCK 1/4" SST
48	978308	8	SCREW SOC HD CAP 1/4-20 X 1/2 SST
49	981716	4	SCREW FLT HD SOC 1/4-20 X 1 SST
50	989908	4	SCREW FIN HEX 1/4-20 X 1/2" SST
51	978312	8	SCREW SOC HD CAP 1/4-20 X 3/4 SST
52	975208	4	SCREW, SHLDR 5/16 X 1 1/2, 1/4-20
53	955402	4	NUT HEX JAM 7/16-20 UNF SST
54	955620	4	NUT HEX NYLOC 3/8-16 UNC SST
55	988932	4	SCREW FIN HEX 3/8-16 X 2 SST
56	955540	29	RIVET BLIND 5/32 DIA X 1/2 ALUMINUM
57	955976	12	WASHER FLAT 5/16 SST
58	989744	2	SCREW FIN HEX 5/16-18 X 2 3/4 SST
59	989716	24	SCREW FIN HEX 5/16-18 X 1 SST
60	989712	4	SCREW FIN HEX 5/16-18 X 3/4 SST
61	978360	4	SCREW SOC HD CAP 1/4-20 X 3 3/4 SST
62	955618	4	NUT HEX NYLOC 1/2-13 UNC SST
63	955974	4	WASHER FLAT 1/2 SST
64	988340	4	SCREW FIN HEX 1/2-13 X 2 1/2 SST
65	989920	2	SCREW FIN HEX 1/4-20 X 1 1/4 SST

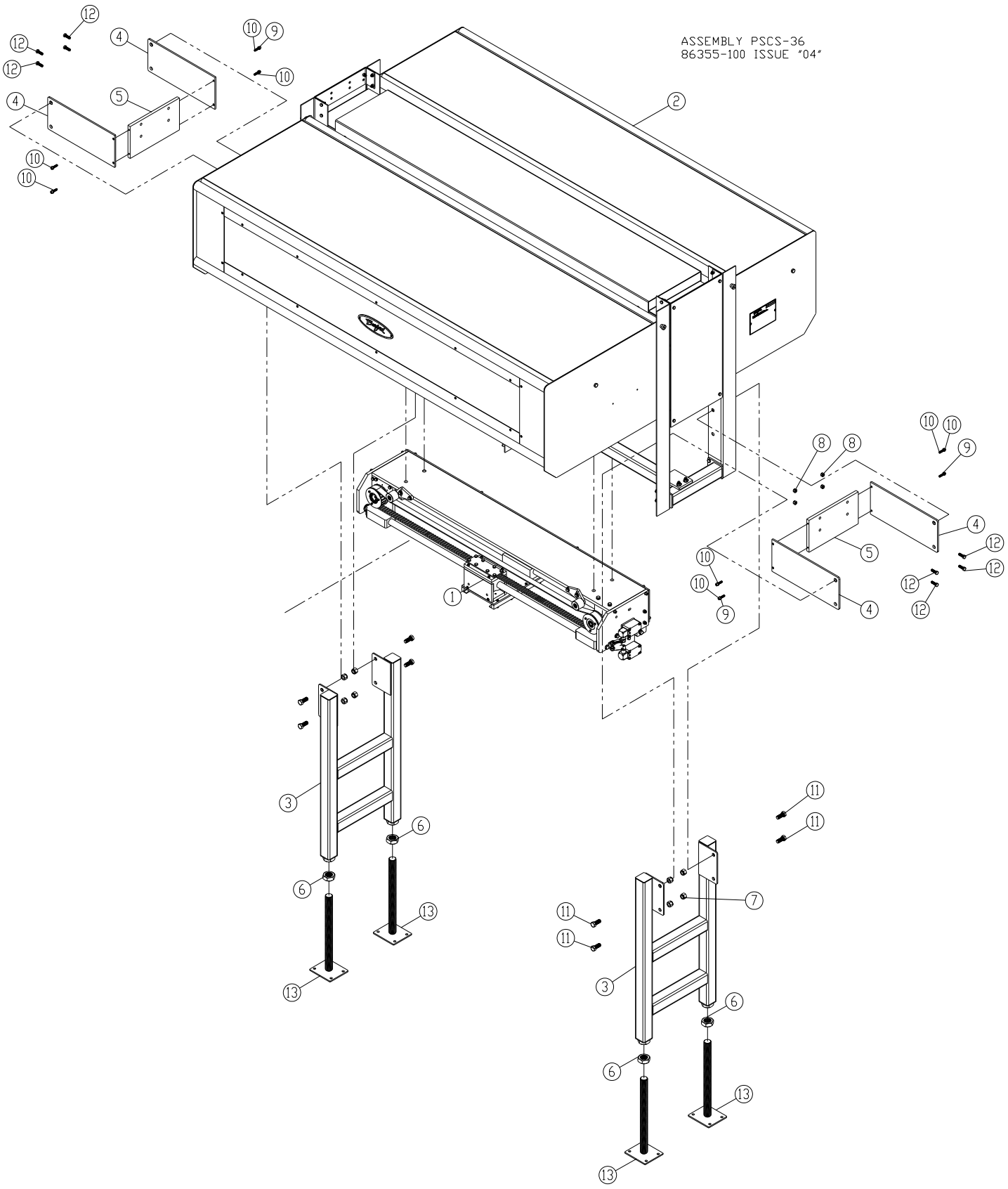
86355-130 ISSUE “03”


ASSY, FRAME & COVERS, PSCS-12-R
86355-130 ISSUE "03"

7.3 PSCS-36 Assembly (86355-100 “04”)

REF	PART #	QTY	DESCRIPTION
1	86355-101	1	ASSY, CARRIER FRAME, PSCS--36
2	86355-130	1	ASSY, FRAME & COVERS, PSCS-12-R
3	86355-145	2	FRAME LEG A/W
4	86355-146	4	PLATE CONVEYOR BRACE
5	86355-147	2	MOUNT BRACE CONV SIDE
6	955390	4	NUT HEX JAM 1-1/8-7 UNC SST
7	955618	8	NUT HEX NYLOC 1/2-13 UNC SST
8	955619	8	NUT HEX NYLOC 5/16-18 UNC SST
9	955940	8	WASHER LOCK 1/4" SST
10	978316	8	SCREW SOC HD CAP 1/4-20 X 1 SST
11	988320	8	SCREW FIN HEX 1/2-13 X 1 1/4 SST
12	989716	8	SCREW FIN HEX 5/16-18 X 1 SST
13	C03324	4	A/W, ALL-THREAD LEG, CONV.

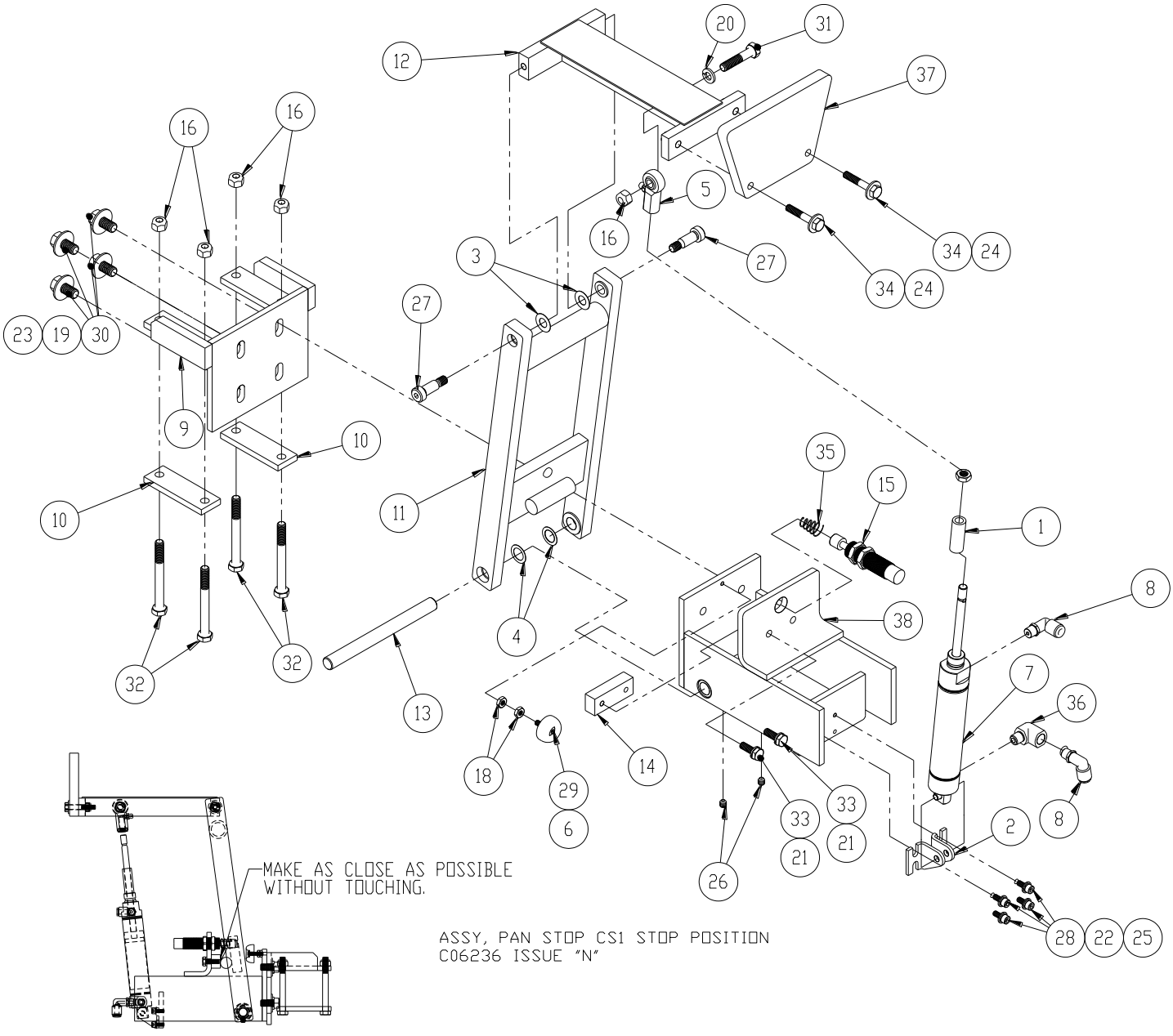
86355-100 ISSUE “04”


ASSEMBLY PSCS-36
86355-100 ISSUE "04"

7.4 Pan Stop Assembly (C06236 “N”)

REF	PART #	QTY	DESCRIPTION
1	111706	1	SPACER, 1/2 OD X .313 ID X 1.38 L
2	111937	1Pair	BRACKET, CYLINDER PIVOT
3	112121	2	BUSHING, 3/8 X 3/4 X .010 MACH.
4	122232	2	BUSHING 1/2 X 3/4 X .010 MACH
5	152075	1	ROD END, 5/16" BEARING
6	152148	1	MOLDED RECESS BUMPER
7	174047	1	CYLINDER, AIR 1 1/8 BORE 3" STROKE 1/8 NPT
8	174049	2	FITTING,ELL,1/8MPT X 1/4T,Q.R,SHORT
9	300460	1	A/W, PAN STOP MOUNT, CS-1
10	300463	2	BAR, BACK-UP CLAMP, PAN STOP, CS-1
11	302770	1	ASSY, PAN STOP PIVOT
12	302776	1	A/W, PAN STOP (SST)
13	302784	1	SHAFT, PIVOT, PAN STOP
14	305398	1	STOP PLATE
15	305399	1	SHOCK ABSORBER
16	955619	5	NUT HEX NYLOC 5/16-18 UNC SST
17	955661	2	NUT HEX NYLOC 1/4-20 UNC SST
18	955823	2	NUT HEX MACH #10-24 NC SST
19	955938	4	WASHER LOCK 3/8"
20	955939	1	WASHER, LOCK 5/16" SST
21	955940	2	WASHER LOCK 1/4" SST
22	955941	4	WASHER LOCK #10 SST
23	955975	4	WASHER FLAT 3/8" SST
24	955977	2	WASHER FLAT 1/4" SST
25	955978	4	WASHER FLAT #10 SST
26	971204	2	SCREW SET SOC 1/4-20 X 1/4 SST
27	975112	2	SCREW SHLDR 3/8 X 3/4, 5/16-18 SST
28	978908	4	SCREW SOC HD CAP #10-24 UNC X 1/2 SST
29	986312	1	SCREW BUTT HD SOC #10-24 X 3/4 SST
30	988912	4	SCREW FIN HEX 3/8-16 UNC X 3/4 SST
31	989724	1	SCREW FIN HEX 5/16-18 X 1 1/2 SST
32	989748	4	SCREW FIN HEX 5/16-18 X 3 SST
33	989912	2	SCREW FIN HEX 1/4-20 X 3/4" SST
34	989924	2	SCREW FIN HEX 1/4-20 X 1 1/2 SST
35	A02332	1	SPRING, BAG CLAMP
36	C00962	1	FITTING, 1/8 MPT STREET ELL
37	86355-152	1	PLATE, PAN STOP (3/4" THK)
38	C06300	1	A/W, BASE PAN STOP

C06236 ISSUE “N”



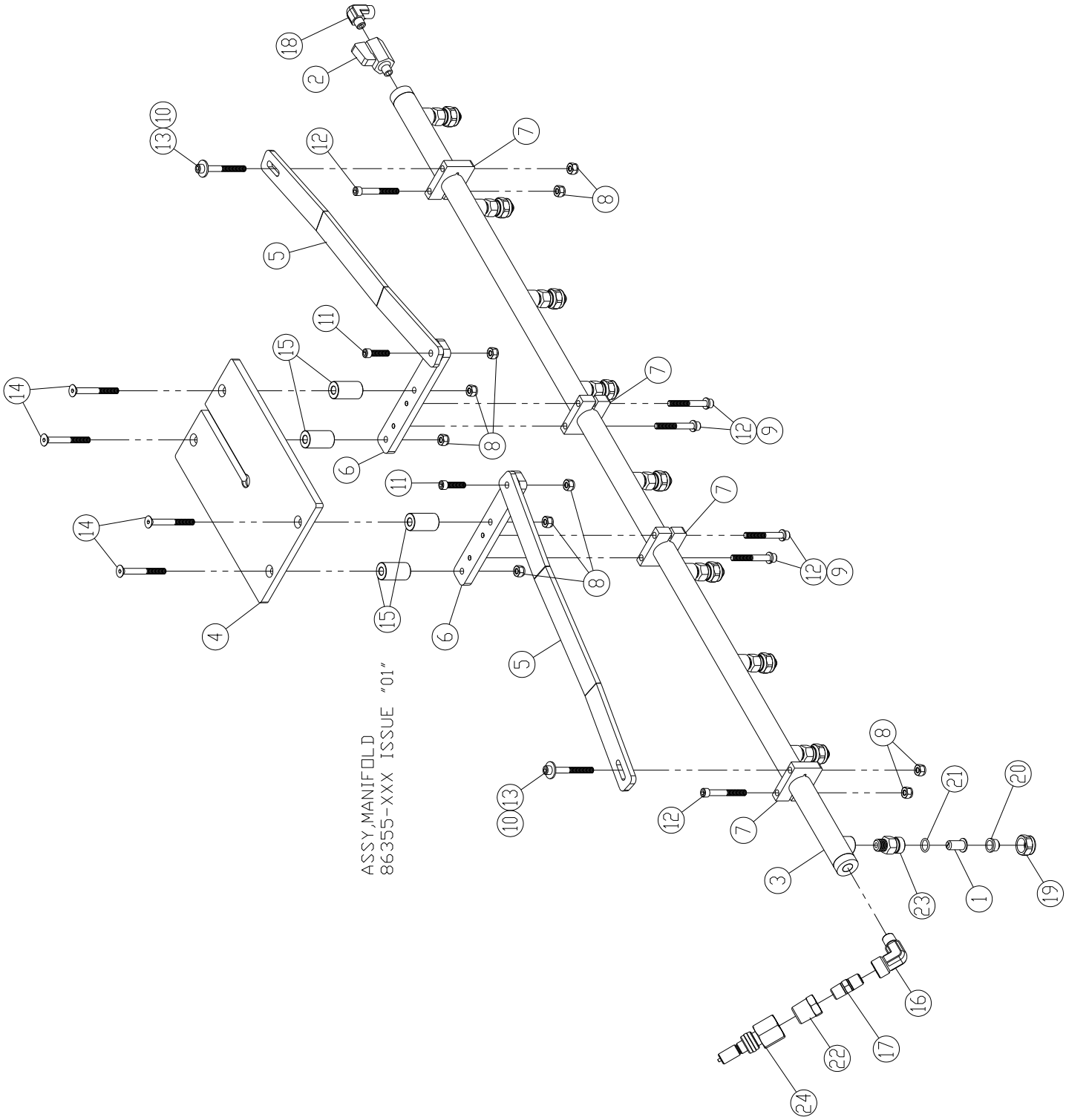
ASSY, PAN STOP CS1 STOP POSITION
C06236 ISSUE "N"

7.5 One Tube Manifold Assembly (86355-XXX “01”)

REF	PART #	QTY	DESCRIPTION
1	611459	REF	CHECK VALVE,STRAINER,20 PSI
2	611545	REF	VALVE, 1/8 NPT, M-F
3	86355-066	REF	A/W, MANIFOLD 9 TIP @ 5.55 CTRS
	86355-063	REF	A/W, MANIFOLD 13 TIP @ 3.86 CTRS
	86355-060	REF	A/W, MANIFOLD 16 TIP @ 3.15 CTRS
	86355-057	REF	A/W, MANIFOLD 13 TIP @ 3.90 CTRS
	86355-054	REF	A/W, MANIFOLD 19 TIP @ 2.64 CTRS
	86355-051	REF	A/W, MANIFOLD 15 TIP @ 3.35 CTRS
4	86355-069	REF	PLATE, MANIFOLD MOUNT 9"L
	86355-068	REF	PLATE, MANIFOLD MOUNT 12"L
	86355-070	REF	PLATE, MANIFOLD MOUNT 14"L
5	86355-072	REF	BAR, MANIFOLD STIFFENER 16"L
	86355-073	REF	BAR, MANIFOLD STIFFENER 14"L
	86355-071	REF	BAR, MANIFOLD STIFFENER 15"L
6	86355-076	REF	BAR, MANIFOLD MOUNT
7	86355-077	REF	CLAMP, MANIFOLD STIFFENER MOUNT
8	955661	REF	NUT HEX NYLOC 1/4-20 UNC SST
9	955940	REF	WASHER LOCK 1/4" SST
10	955977	REF	WASHER FLAT 1/4" SST
11	978316	REF	SCREW SOC HD CAP 1/4-20 X 1 SST
12	978332	REF	SCREW SOC HD CAP 1/4-20 X 2 SST
13	978336	REF	SCREW SOC HD CAP 1/4-20 X 2 1/4 SST
14	981738	REF	SCREW,FLT HD SOC 1/4-20 X 2 3/8 SST
15	A06670	REF	SPACER. .34 ID, .75 OD, 1.300 L AL
16	A06857	REF	FITTING,STREET ELL,1/4M X 1/4F,SST
17	A06878	REF	FITTING,NIPPLE,HEX,1/4 NPTM,SST
18	A06942	REF	FITTING,STREET ELL,1/8M X 1/8F,SST
19	C00506	REF	RETAINER CAP CP1325-NP
20	C00543	REF	TIP, SPLITTER .019
21	C01164	REF	O-RING, .489 ID X .070 THICK
22	C01951	REF	FITTING, 1/2NPT X 1/4FPT REDUCING BUSHING
23	C06037	REF	NOZZLE BODY, 1/4" NPT, SST
24	C07622	REF	FITTING,QC,STEM,LIQ,1/2 NPTF,SST

86355-XXX ISSUE “01”

Note:	Verify manifold length and nozzle quantity before ordering.


ASSY,MANIFOLD
86355-XXX ISSUE "01"

7.6 Pneumatics And Water Assembly (86355-160 “01”)

REF	PART #	QTY	DESCRIPTION
1	610885-05	18’	TUBING, ¼” YELLOW POLYURETHANE
	C06037	*	NOZZLE BODY, 1/4NPT, SST
3	110412	1	FITTING, TEE, ¼” NPT
4	110414	2	FITTING, NIPPLE, ¼” NPT
5	401152	7	FITTING, ¼” NPT X ¼” HOSE, QR
6	118872	1	FITTING, BODY, ¼” FPT X QUICK RELEASE
	611119	REF	VALVE,SOL,AIR,4WY,5P,1/8 OR,1/4N,24V
8	611459	*	CHECK VALVE,STRAINER,20PSI
9	955661	4	NUT, HEX NYLOC, ¼-20 UNC
10	955977	4	WASHER, FLAT, ¼”
11	989912	4	SCREW, FIN HEX, ¼-20 X ¾”
12	A06707	1	GAUGE, 0 – 200 PSI, SST
13	A06857	1	FITTING, ELBOW, ¼”, SST
14	A06878	1	FITTING, NIPPLE, ¼” NPT X 1-1/2”, SST
15	A07003	1	FITTING, ADAPTER, 3/8” FLAIR X ¼” MPT
16	303330	1	MOUNT,VALVE,CS-1 (NOT SHOWN)
17	610459	3	FITTING,BULKHEAD,STR,1/4”X1/4”
18	C00404	1	FRL COMBO
19	610531	6	FITTING, “Y”, ¼” X ¼”
20	C07612	1	FITTING, ADAPTER, ½” NPTF X ¾” JIC, SST
21	C05575	1	FITTING, ELBOW, ½” NPT, SST
22	C01018	1	FITTING, NIPPLE, ½” NPT X 2”, SST
23	C07621	1	REGULATOR, WATER, ½” NPT

86355-160 ISSUE “01”

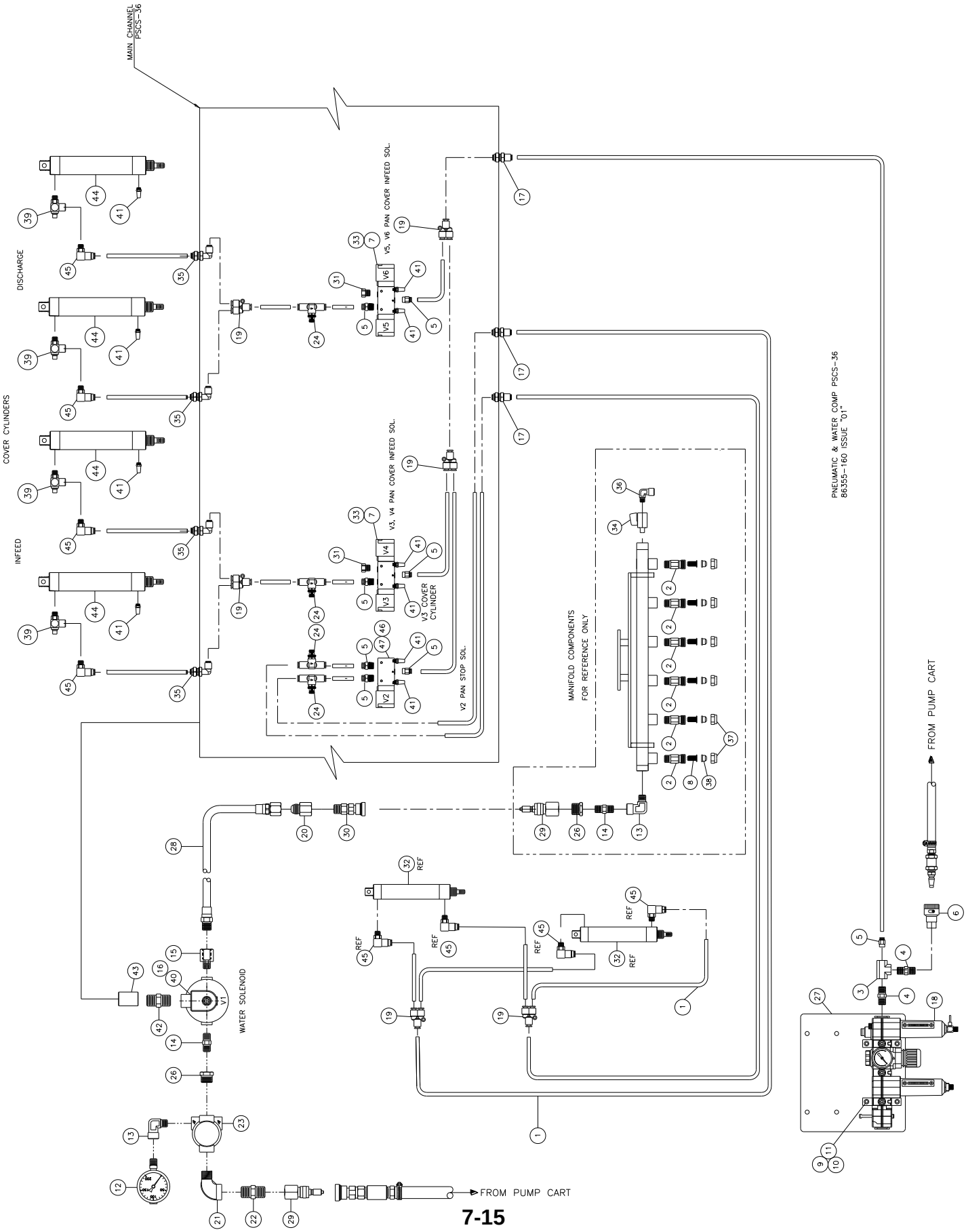
* - PER CUSTOMER SPECIFICATIONS.

7.6 Pneumatics And Water Assembly (86355-160 “01”) cont’d.

REF	PART #	QTY	DESCRIPTION
24	401302	4	FLOW CONTROL, 1/4”
25	*	REF	MANIFOLD ASSEMBLY
26	C01951	1	FITTING, BUSHING, ½” X ¼”, SST
27	C03335	1	PLATE, FRL MOUNTING
28	C04803	1	ASSEMBLY, HOSE, 72” LONG X 3/8”, SST
29	C07622	1	FITTING, QUICK CONNECT STEM, ½” FPT, SST
30	C07623	1	FITTING, QUICK CONNECT BODY, ½” MPT, SST
	C00917	2	HEX,PLUG,1/4”NPT,SS
	174047	REF	CYLINDER, AIR
	C07626	REF	CABLE,SENSOR,VALVE
	611545	*	VALVE, 1/8” NPT
	610956	4	FITTING,BULKHEAD,ELL,1/4”X1/4”
	A06942	*	FITTING, ELBOW, 1/8”, SST
31	C00506	*	CAP, RETAINER
32	C00543	*	TIP, TEE JET
	119590	4	FLOW CONTROL, 1/8”NPT
	305932	REF	VALVE, SOL, SS, ¼”NPT, 2 WAY, 24VDC
	111497	10	MUFFLER, 1/8”
33	712883	1	NIPPLE, REWORK, 1/2" NPT
34	C03613	1	FITTING, COUPLING, 1/2" NPT, SST
35	401149	REF	CYLINDER,AIR,1 ½” BORE, 8”, ST 1/8”
36	174049	4	FITTING, ELBOW, 1/8” MPT X ¼” TUBE
37	611117	REF	VALVE,SOL,24V,3WAY,CLOSE CEN
38	C07626	REF	CABLE,SENSOR,VALVE

86355-160 ISSUE “01”

* - PER CUSTOMER SPECIFICATIONS.


MAIN CHANNEL PSCS-36
DISCHARGE
COVER CYLINDERS
INFEED
V5, V6 PAN COVER INFEED SOL.
V3, V4 PAN COVER INFEED SOL.
V3 COVER CYLINDER
V2 PAN STOP SOL.
MANIFOLD COMPONENTS FOR REFERENCE ONLY
PNEUMATIC & WATER COMP PSCS-36 86355-160 ISSUE "01"
WATER SOLENOID
FROM PUMP CART
FROM PUMP CART
REF

7.7 Pump Cart Assembly (C0600801 “O”)

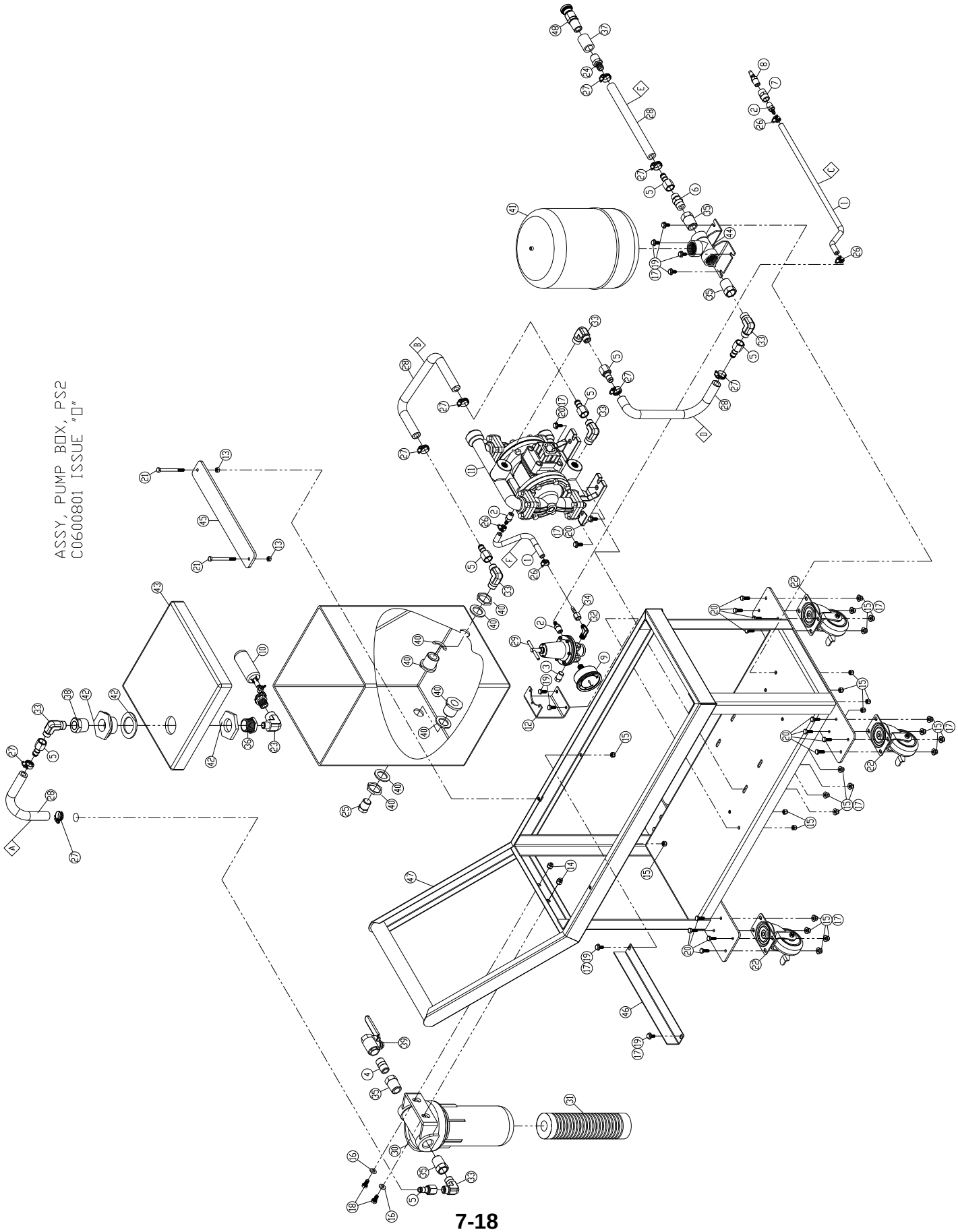
REF	PART #	QTY	DESCRIPTION
1	103878	23'	HOSE, AIR 1/4" DIA NEOPRENE
2	110415	3	FITTING, 1/4 NPT M PUSH ON
3	110423	1	FITTING, 1/4" NPT PLUG
4	110426	1	FITTING,NIPPLE,CLOSE,1/2 NPTM,BRS
5	110430	7	FITTING,HOSE BARB,3/4-16JIC X 1/2H
6	110431	1	FITTING,CONN,1/2MPT X 3/4-16F,BRS
7	112034	1	FITTING,COUPLING,1/4 NPTF,BRS
8	118871	1	FITTING,QC,STEM,AIR,1/4 NPTM,BRS
9	303674	1	GAUGE 0-200 PSI 1/4 NPT BACK MT SST
10	305716	1	FLOAT VALVE MINI ADJ 1/2"
11	611121	1	PUMP, AIR POWERED DBL DIAPHRAGM
12	713714	1	REGULATOR BRACKET, PUMP CART
13	955409	2	NUT HEX JAM 1/4-20 UNC SST
14	955619	2	NUT HEX NYLOC 5/16-18 UNC SST
15	955661	28	NUT HEX NYLOC 1/4-20 UNC SST
16	955976	2	WASHER FLAT 5/16 SST
17	955977	30	WASHER FLAT 1/4" SST
18	989710	2	SCREW FIN HEX 5/16-18 X 5/8 SST
19	989910	8	SCREW FIN HEX 1/4-20 X 5/8" SST
20	989912	20	SCREW FIN HEX 1/4-20 X 3/4" SST
21	989948	2	SCREW FIN HEX 1/4-20 X 3 SST
22	A04225	4	CASTER, 3" LOCKING/SWIVEL, 145#
23	A06856	1	FITTING, REDUCING ELL 1/2F X 3/8M SS
24	A06859	1	FITTING, 1/2MPT X 1/2 TUBE
25	A07726	1	FITTING, PLUG 1/2" PVC
26	C00414	4	CLAMP 1/4" TO 5/8" SST
27	C00415	8	CLAMP #6 STAINLESS HOSE

C0600801 ISSUE “O”

7.7 Pump Cart Assembly (C0600801 “O”) cont’d.

REF	PART #	QTY	DESCRIPTION
28	C00435	24'	HOSE, 1/2" VINYL W/ POLYESTER
29	C00537	1	REGULATOR, AIR, 1/4 NPT PORTS
30	C00578	1	FILTER, WATER, 3/4" NPTF
31	C00579	1	FILTER REPLACEMENT # AP110
32	C00998	1	FITTING 49FB 1/4 X 7/16 JIC 90 BR
33	C01903	6	FITTING,ELL,1/2MPT X 3/4-16F,BRS
34	C01915	1	FITTING,HOSE BARB,7/16-20JIC X 1/4H
35	C01947	4	FITTING, BUSHING, 3/4 X 1/2 BRASS
36	C01958	1	FITTING,REDUCER,1" MPT X 3/8FPT,SST
37	C03613	1	FITTING,COUPLING,1/2 NPTF,SST
38	C05339	1	FITTING, REDUCER, 1" x 1/2" SST
39	C05431	1	VALVE, 1/2 NPT 2-WAY, BALL, SST
40	C05576	2	FITTING, 1/2 NPT BULKHEAD, PL.
41	C06171	1	TANK, WATER RECHARGER
42	C06174	1	FITTING, BULKHEAD 1" POLY
43	C06176	1	RWK, TANK & COVER
44	C06183	1	TEE MOUNT A/W
45	C06195	1	PLATE, COVER CLAMP
46	C06196	1	BRACKET, UPPER TANK
47	C06200	1	A/W, TANK BASE
48	C07623	1	QUICK CONNECT BODY, 1/2 MPT
A	REF	12"	FILTER TO TANK
B	REF	14"	TANK TO PUMP
C	REF	22'	AIR LINE - SOURCE TO PUMP
D	REF	14"	PUMP TO ACCUMULATOR
E	REF	20'	ACCUMULATOR TO SYSTEM
F	REF	10"	PUMP TO REGULATOR

C0600801 ISSUE “O”


ASSY, PUMP BOX, PS2
C0600801 ISSUE "□"

7.8 Pump Cart Repair Kit Assembly (611765-611766 “A”)

7.8.1 Air End Kit (611765 “A”)

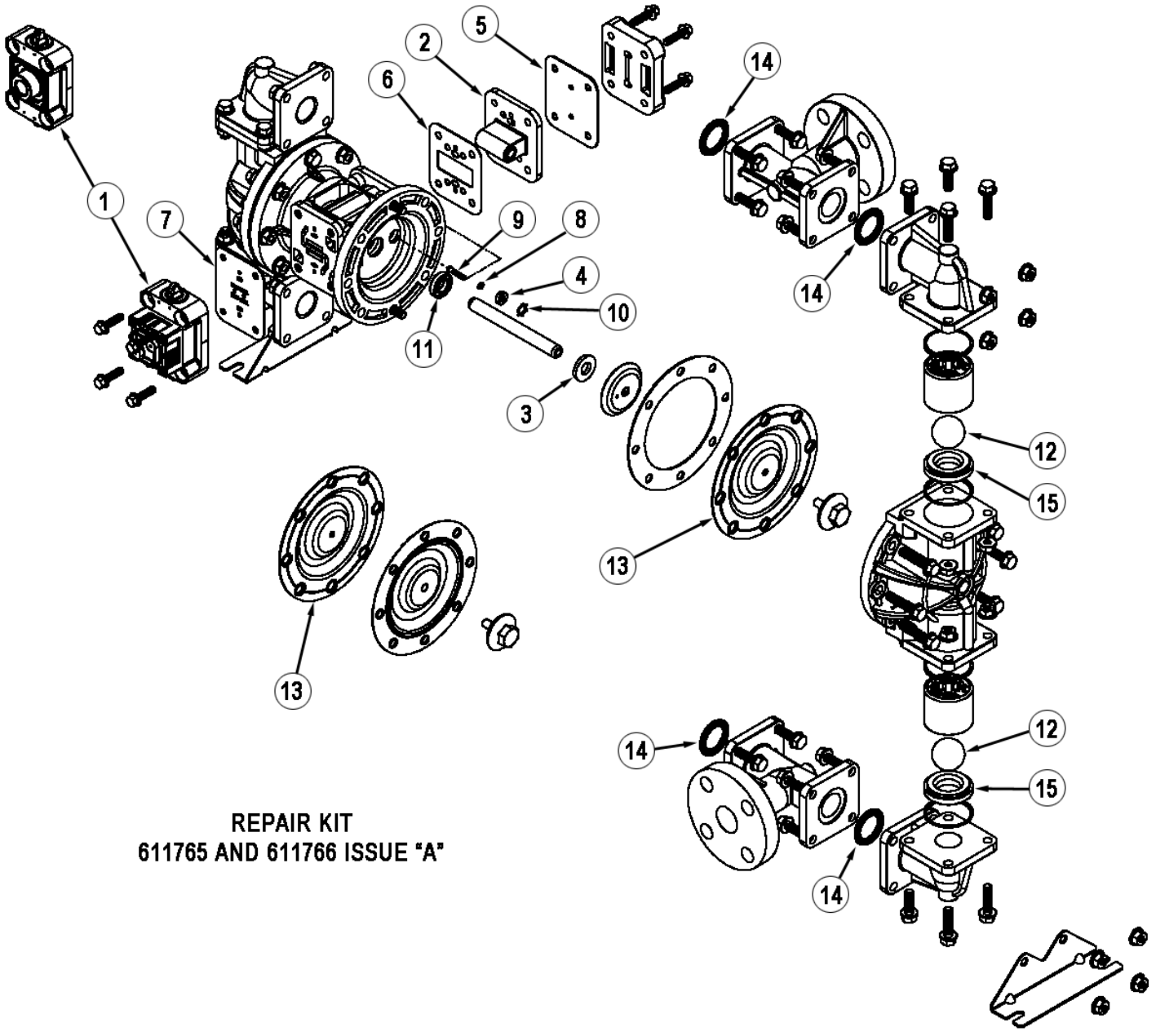
REF	PART #	QTY	DESCRIPTION
1	031-168-000	1	Air Valve Assembly
2	095-091-000	1	Pilot Valve Assembly
3	132-034-360	2	Bumper, Diaphragm
4	135-036-506	2	Bushing, Plunger
5	360-100-360	1	Gasket, Air Inlet
6	360-101-360	1	Gasket, Pilot Valve
7	360-102-360	1	Gasket, Air Valve
8	560-001-360	2	O-ring
9	620-019-115	2	Plunger, Actuator
10	675-042-115	2	Ring, Retaining
11	720-012-360	2	Seal, Diaphragm Rod

611765 ISSUE “A”

7.8.2 Wetted End Kit (611766 “A”)

REF	PART #	QTY	DESCRIPTION
12	050-027-360	4	Ball, Check Valve
13	286-095-360	2	Diaphragm
14	720-045-600	4	Seal, Manifold
15	722-099-600	4	Seat, Check Valve

611766 ISSUE “A”



REPAIR KIT
611765 AND 611766 ISSUE "A"

7.9 Wiring Diagram (086355-WD "A")

STANDARD PATTERN SPLITTER				
REF	**SYMBOL**	**PART #**	**QTY**	**DESCRIPTION**
1	CB1	C07650-210	1	CIRCUIT BREAKER,600V,10A
2	CB2	C07650-205	1	CIRCUIT BREAKER,600V,5A
3	CB3	C07649-004	1	CIRCUIT BREAKER,250V,4A
4	CB3 P/O	C07649-100	1	CIRCUIT BREAKER,250V,HOLDER
5	CBL1-A,B	304494	2	CABLE, PLC, BLUE PATCH, SNAGLESS
6	CBL2	610246	1	CABLE, 8 COND, 24 AWG, SHIELDED
7	CBL3	611361	1	CABLE, COMMUNICATION
8	CBL3 P/O	611362	1	CONNECTOR, 44 PIN, FEMALE
9	CBL3 P/O	611105	1	CONNECTOR, 44 PIN, BACKSHELL
10	CBL4	611639	1	CABLE, MOTOR FEEDBACK
11	CBL4 P/O	611636	1	CONNECTOR, 15 PIN, MALE
12	CBL4 P/O	611637	1	CONNECTOR, 15 PIN BACKSHELL
13	CBL5	611638	1	CABLE, MOTOR POWER
14	CRM	C07245	1	RELAY, CONTACTOR, 24 VDC, 4 N.O.
15	CR1	610404-001	1	RELAY, TERMINAL MTNG, 24 VDC, SPDT
16	CRE1-3	610421-001	3	RELAY, TERMINAL MTNG, 24 VDC, SSR
17	CRE1-3 P/O	610443-011	1	JUMPER, RELAY TERMINAL, 32 A, RED
18	CRE1-3 P/O	610443-013	1	JUMPER, RELAY TERMINAL, 32A, GRAY
19	DISC1	A02345	1	DISCONNECT, MAIN ELECTRICAL, 3 POLE
20	DISC1 P/O	A02346	1	HANDLE, DISCONNECT
21	DISC1 P/O	610342-001	1	SHAFT, DISCONNECT
22	DISP1	304277-001	1	DISPLAY, PLC, PV-600, TOUCH,ETHERNET
23	DRV1	611281	1	CONTROLLER,SERVO DRIVER,ULTRA3000
24	ENC1	C07190	1	ENCLOSURE, MAIN ELECTRICAL, SST

086355-WD ISSUE "A"

7.9 Wiring Diagram (086355-WD "A") cont'd.

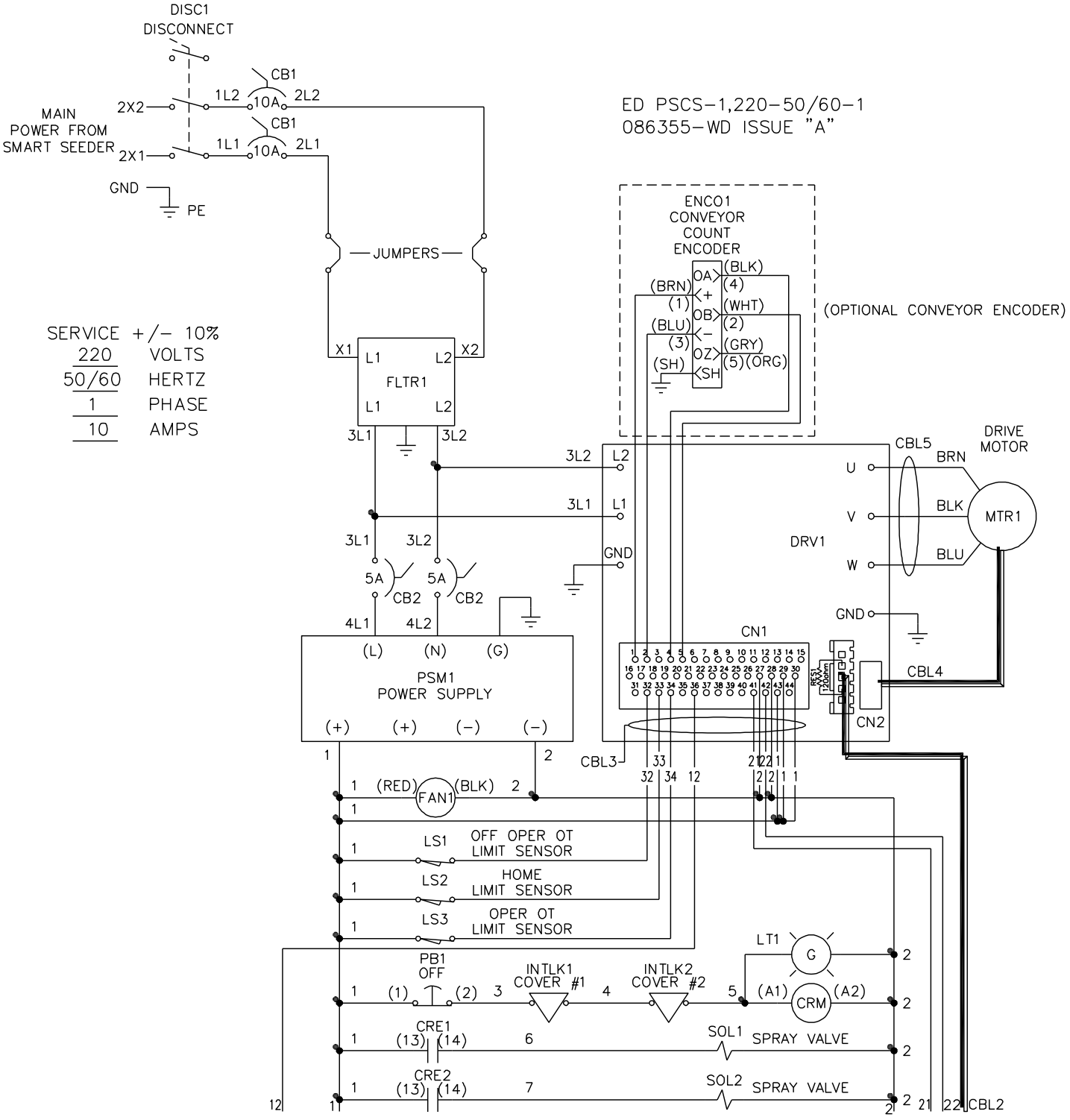
STANDARD PATTERN SPLITTER cont'd.				
REF	**SYMBOL**	**PART #**	**QTY**	**DESCRIPTION**
25	ENC1 P/O	C06570	1	A/W, ENCLOSURE GUARD
26	ENC1 P/O	C03845	8	SPACER, 9/32" X ¾" X ¾", SST
27	ENC2	86355-158	1	ENCLOSURE,J-BOX
28	FAN1	C07060	1	FAN, 10-30 VDC, 32 CFM
29	FAN1 P/O	A07833	1	BRACKET, FAN MOUNTING
30	FLTR1	611069	1	FILTER, ELECTRICAL LINE
31	FLTR1 P/O	710040	1	BRACKET, FILTER MOUNTING
32	GND	C06488	2	LUG, GROUNDING
33	GND STRP	C07156	1	STRAP, DOOR GROUNDING, 24"
34	INTLK1,2	C07219	2	SWITCH, INTERLOCK, KEYED, N.O. / N.C.
35	INTLK1,2 P/O	C07220	2	MAGNET, INTERLOCK SWITCH
36	LS1-3	103972	3	SWITCH, LIMIT, 0 – 230 VOLT, N.O. / N.C.
37	LS1-3 P/O	111043	3	ROLLER, LIMIT SWITCH ACTUATOR
38	LT1	C01301	1	ASSEMBLY, LIGHT SWITCH, 24 VDC
39	LT1 P/O	C01218	1	SWITCH, LENS CAP w/LATCH, GREEN
40	LT1 P/O	C01263	1	NAMEPLATE, "POWER ON"
41	LT2	C07087	1	LIGHT, RED STROBE, 24 VDC
42	MTR1	611640	1	MOTOR, STEPPER
43	PB1	C07213	1	SWITCH, PUSH – PULL, RED MUSHROOM
44	PB1 P/O	C07101	1	CONTACT CARTRIDGE, N.C.
45	PB1 P/O	C05395	1	NAMEPLATE, "PUSH – OFF / PULL – ON"
46	PLC1	611133	1	PLC, COMPACTLOGIX, PROC, ETHERNET
47	PLC1 P/O	611288	1	PLC,COMPACTLOGIX,DEVICENET MOD
48	PLC1 P/O	610738	1	PLC,COMPACTLOGIX,POWER SUPPLY,PB2
49	PLC1 P/O	610632	1	PLC, COMPACTLOGIX, MOD,16OUT
50	PLC1 P/O	611122	1	PLC,COMPACTLOGIX,MOD,16IN FAST

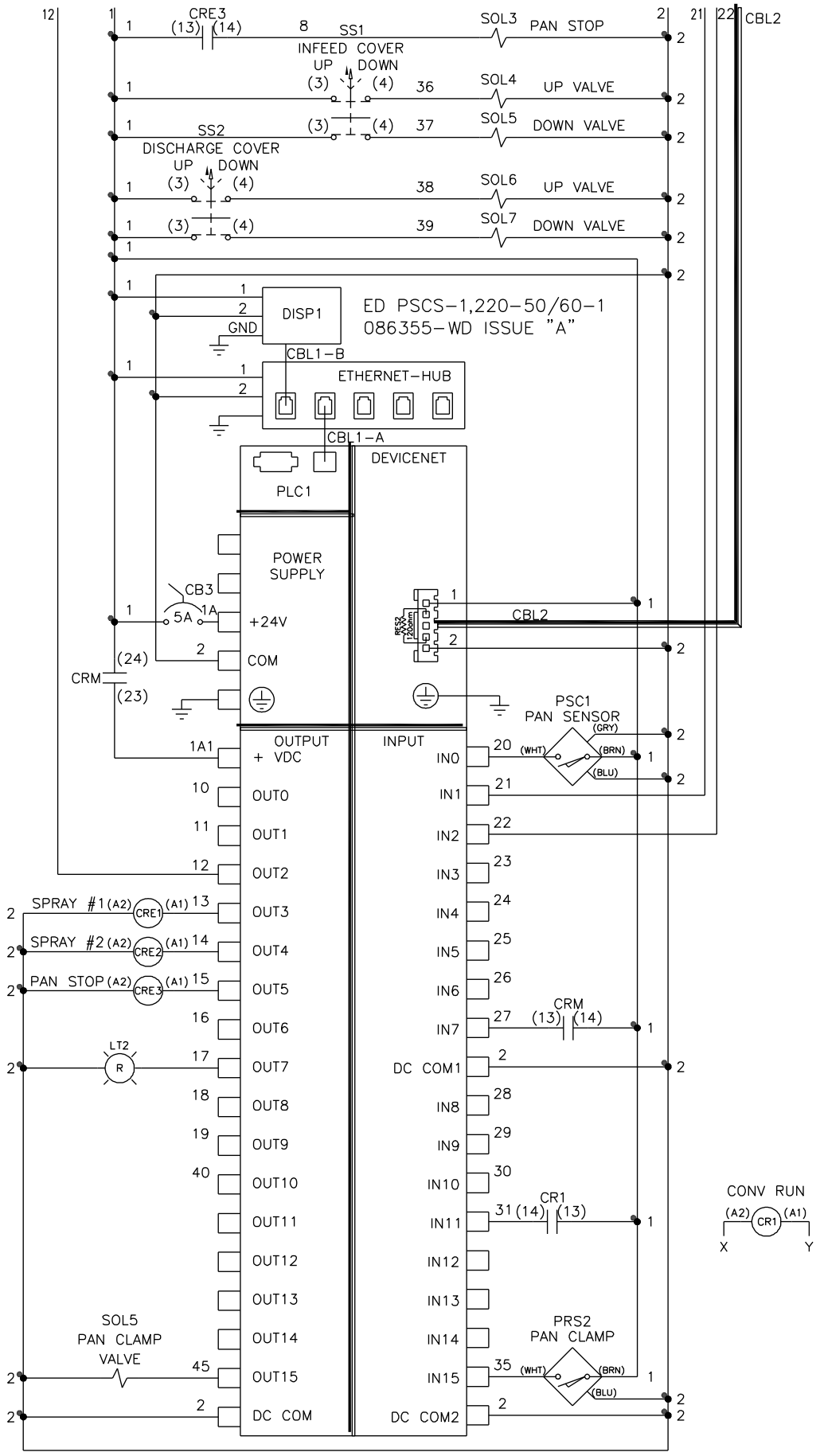
086355-WD ISSUE "A"

7.9 Wiring Diagram (086355-WD "A") cont'd.

STANDARD PATTERN SPLITTER cont'd.				
REF	**SYMBOL**	**PART #**	**QTY**	**DESCRIPTION**
51	PLC1 P/O	610494	1	PLC, COMPACTLOGIX, RIGHT END CAP
52	PLC1 P/O	611227	1	PLC, ETHERNET MODULE, HIRSCHMANN
53	PNL1	C07191	1	PANEL, MAIN ELECTRICAL
54	PNL2	C06969	1	PANEL,J-BOX
55	PSC1	610797	1	SENSOR,RETROREFLECTIVE, 10 30 VDC
56	PSC1 P/O	C06753	1	CABLE, SENSOR, M12, 5 WIRE, FEMALE
57	PSM1	C07474	1	POWER SUPPLY,110/220VAC–24VDC,5A
58	RES1,2	610093	2	RESISTOR, 120 OHM, ¼ WATT
59	SOL1,2	305935	2	VALVE, SOLENOID, 24 VDC
60	SOL3	C07105	1	VALVE, SOLENOID, PNEUMATIC, 24 VDC
61	SOL4/5,6/7	611119	2	VALVE, SOLENOID, 24 VDC
62	SOL4/5,6/7	A02349	4	SENSOR,CABLE,M8,3WIRE,F,QC,STR
63	SS1,2	C01300	2	SWITCH,SELECTOR,3POS,DETENT
64	SS1,2 P/O	C07102	4	CONTACT CARTRIDGE,N.O.
65	SS1 P/O	86355-400	1	NAMEPLATE,INFEED COVER DOWN/UP
66	SS1 P/O	86355-401	1	NAMEPLATE,DISCHARGE COVER DOWN/UP
67	TB1 P/O	C05843	60	TERMINAL, MARKER STRIP, BLANK
68	TB1 P/O	610300	12	TERMINAL, BLOCK, TRIPLE LEVEL
69	TB1 P/O	610301	1	TERMINAL, END COVER, TRIPLE LEVEL
70	TB1 P/O	C06463	1	TERMINAL, JUMPER, 10 POSITION
71	TB1-4 P/O	C06464	32"	RAIL, DIN MOUNTING
72	TB1-4 P/O	C06465	8	TERMINAL, CLAMP, END ANCHOR
73	TB1 P/O	C06525	5	TERMINAL, GROUNDING
74	TB1 P/O	C07117	10	TERMINAL, BLOCK, DUAL LEVEL
75	TB1 P/O	C07118	2	TERMINAL, END COVER, DUAL LEVEL
76	TB5 P/O	710829	1	BRACKET, MINI DIN RAIL MOUNTING
77	TB5,6 P/O	610360	10"	RAIL, MINI DIN MOUNTING
78	TB5,6 P/O	610361	40	TERMINAL, BLOCK, MINI
79	TB5,6 P/O	610362	3	TERMINAL, END COVER, MINI
80	TB5,6 P/O	610363	4	TERMINAL, CLAMP, END ANCHOR, MINI
81	TB6 P/O	610533	1	JUMPER,3-POS,MINI
82	TB6 P/O	610364	1	JUMPER,10POS,MINI
CONVEYOR ENCODER (OPTIONAL)				
1	ENCO1	611102	1	ENCODER,INCREMENTAL,3CHANNEL
2	ENCO1 P/O	C06753-002	1	SENSOR,CABLE,M12,5WIRE,F,QC,STR,SH

086355-WD ISSUE "A"


DISC1
DISCONNECT
CB1
1L2
10A
2L2
2X2
MAIN
POWER FROM
SMART SEEDER
2X1
1L1
10A
2L1
GND
PE
JUMPERS
ED PSCS-1,220-50/60-1
086355-WD ISSUE "A"
SERVICE +/- 10%
220 VOLTS
50/60 HERTZ
1 PHASE
10 AMPS
ENCO1
CONVEYOR
COUNT
ENCODER
OA
OB
OZ
SH
(BLK)
(4)
(WHT)
(2)
(GRY)
(5)(ORG)
(BRN)
(1)
(BLU)
(3)
(SH)
(OPTIONAL CONVEYOR ENCODER)
X1
X2
L1
L2
FLTR1
3L1
3L2
CBL5
DRIVE
MOTOR
BRN
BLK
BLU
U
V
W
MTR1
DRV1
GND
5A
CB2
4L1
4L2
(L)
(N)
(G)
PSM1
POWER SUPPLY
(+)
(+)
(-)
(-)
CN1
CN2
CBL4
CBL3
(RED)
FAN1
(BLK)
LS1
OFF OPER OT
LIMIT SENSOR
LS2
HOME
LIMIT SENSOR
LS3
OPER OT
LIMIT SENSOR
PB1
OFF
INTLK1
COVER #1
INTLK2
COVER #2
LT1
G
(A1)
CRM
(A2)
CRE1
CRE2
SOL1
SPRAY VALVE
SOL2
SPRAY VALVE
CBL2


CRE3
SS1
INFEED COVER
SS2
DISCHARGE COVER
SOL3 PAN STOP
SOL4 UP VALVE
SOL5 DOWN VALVE
SOL6 UP VALVE
SOL7 DOWN VALVE
CBL2
DISP1
ED PSCS-1,220-50/60-1
086355-WD ISSUE "A"
CBL1-B
ETHERNET-HUB
CBL1-A
DEVICENET
PLC1
POWER SUPPLY
CB3
5A
1A
+24V
COM
CRM
PSC1
PAN SENSOR
OUTPUT
+ VDC
INPUT
OUT0
OUT1
OUT2
OUT3
OUT4
OUT5
OUT6
OUT7
OUT8
OUT9
OUT10
OUT11
OUT12
OUT13
OUT14
OUT15
DC COM
IN0
IN1
IN2
IN3
IN4
IN5
IN6
IN7
DC COM1
IN8
IN9
IN10
IN11
IN12
IN13
IN14
IN15
DC COM2
SPRAY #1
SPRAY #2
PAN STOP
LT2
SOL5
PAN CLAMP
VALVE
PRS2
PAN CLAMP
CR1
CONV RUN