



# PressureTech SMART-Table

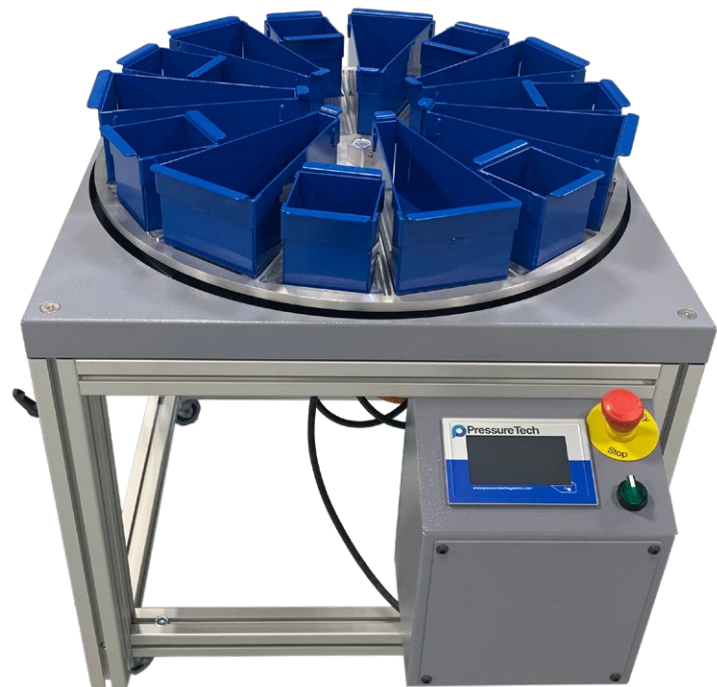
Automated Parts Carousel

Models: ST-15, ST-22

## OPERATION MANUAL



ST-15



ST-22

# Table of Contents

<b>Safety Instructions</b>	.....	<b>pg. 3</b>
<b>Operation</b>	.....	<b>pg. 4</b>
<b>Elec. Panel Assembly</b>	.....	<b>pg. 5</b>
<b>ST-15 Assembly</b>	.....	<b>pg. 6</b>
<b>ST-22 Assembly</b>	.....	<b>pg. 7</b>
<b>HMI Navigation</b>	.....	<b>pg. 8</b>
<b>Alarms</b>	.....	<b>pg. 9</b>
<b>Warranty</b>	.....	<b>pg. 10</b>

## **SAFETY INSTRUCTIONS**

- Make sure electrical power is disconnected before servicing the parts carousel or electrical cabinet.
- Do not move the parts carousel while it is powered on.
- For maintenance purposes, only use parts provided or recommended by PressureTech and New England Tool Corporation.
- In case of emergency press the E-STOP (Emergency Stop) button on the parts carousel disconnect power by unplugging the power cord from the outlet.
- Allow only qualified personnel to handle and service your automatic parts carousel.
- Make sure the parts carousel is not making any erratic (unusual) noise during operation.
- Prevent oil or water from coming into contact with any and all electrical equipment.

# OPERATION

## MODES OF OPERATION

The automated parts carousel operates in 3 modes, all with an inspection feature, to fit the needs of the operator.

1. Timer Mode: The dial will index after the time entered into the Settings Page has expired.
2. M-Code Mode: The dial will index every time the input signal is received on the supplied cable.
3. Counter Mode: The dial will index once the count entered in the Settings Page has been reached. This mode counts the number of times the input signal is triggered.
4. Inspection Feature: When enabled, the dial will index after the main timer/counter has been reached. The dial will then index again when the inspection timer/counter has been reached. It will repeat this alternate indexing routine between Mode cycles.

## SETTING UP THE UNIT

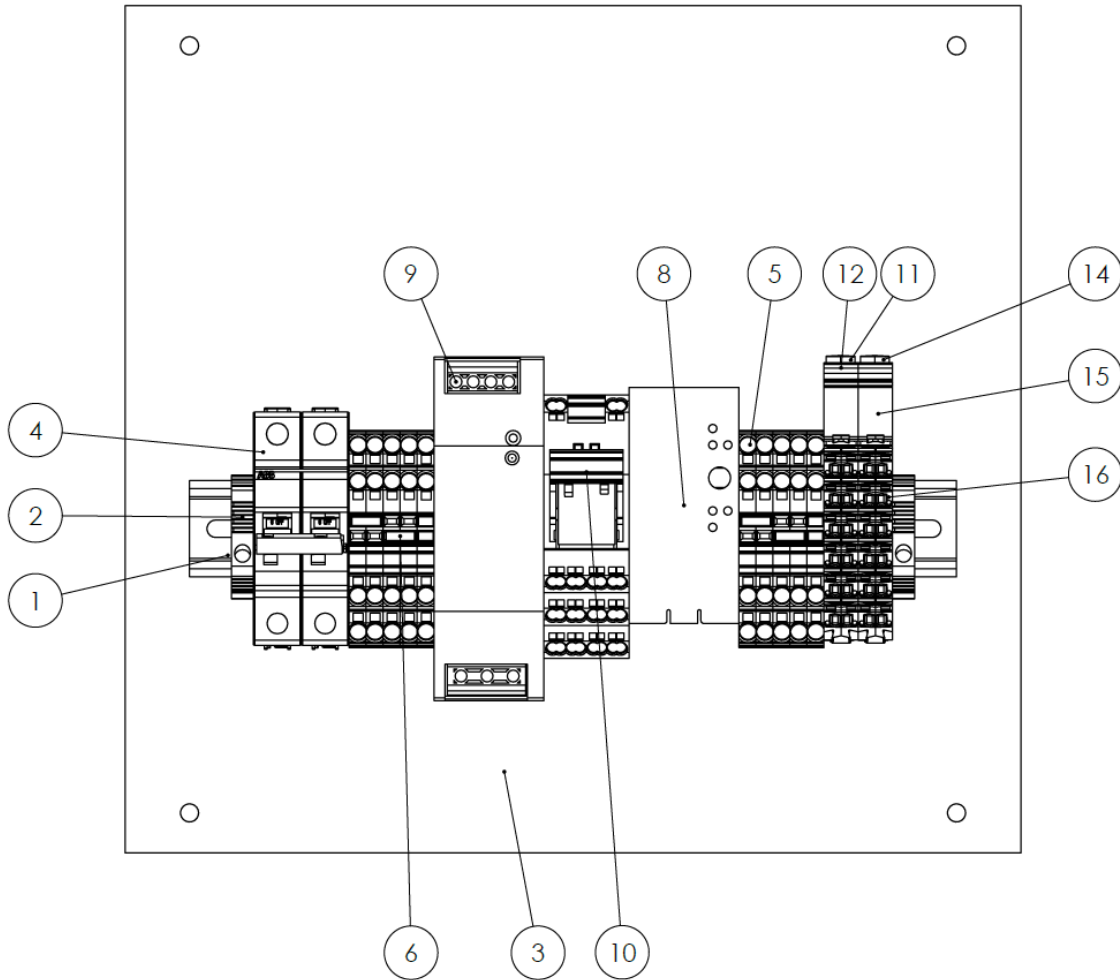
The automated parts carousel is mobile and very easy to set up from machine to machine.

1. Move the unit to the part conveyor of the machine. Adjust the height to just beneath the chute so the parts fall into the collection bin on the carousel. Tighten the height adjustment knobs and lock the wheel casters.
2. Plug the unit into an outlet.
3. Turn the Power Switch to the ON position. The Power Switch will light up green.
4. Go to the Setting page and make any adjustments required for the application. Ensure that the desired Mode of Operation has been selected.
5. Using the JOG button on the Home screen, align the parts chute with the bin you'd like to start the cycle with.
6. To begin the cycle, press the RUN button. The operation mode will be displayed on the Home screen.

## M-CODE WIRING

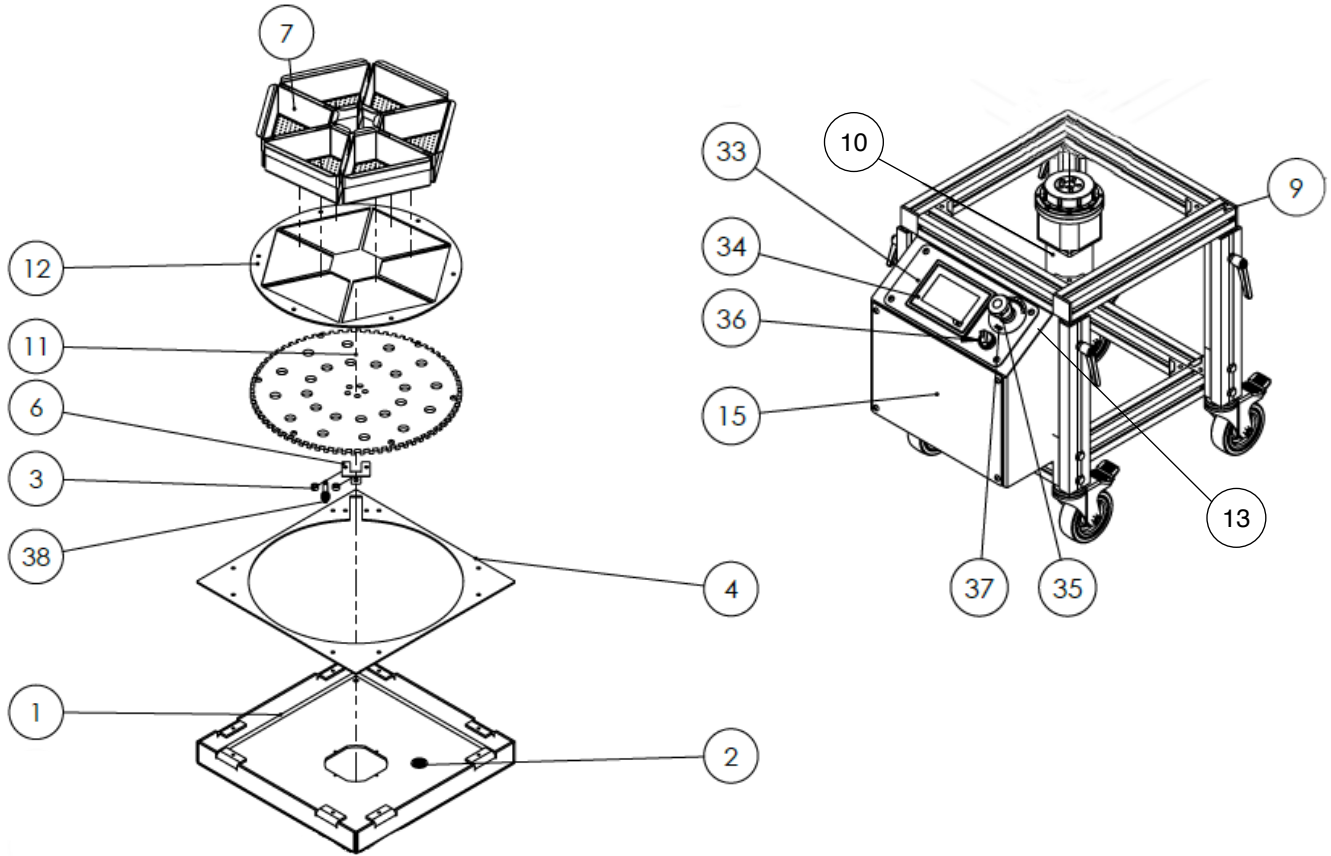
When using the M-code, the supplied cable needs to be wired to a dry contact. The BROWN wire will have 24VDC already running through it provided by the SMART-Table. The BLACK wire will need to see the this 24VDC in order for the system recognize the input signal. The system only recognizes the rising edge of the input signal. As such, the contact needs to be turned off before it can be turned back on to be recognized as a new input.

# ELECTRICAL PANEL ASSEMBLY



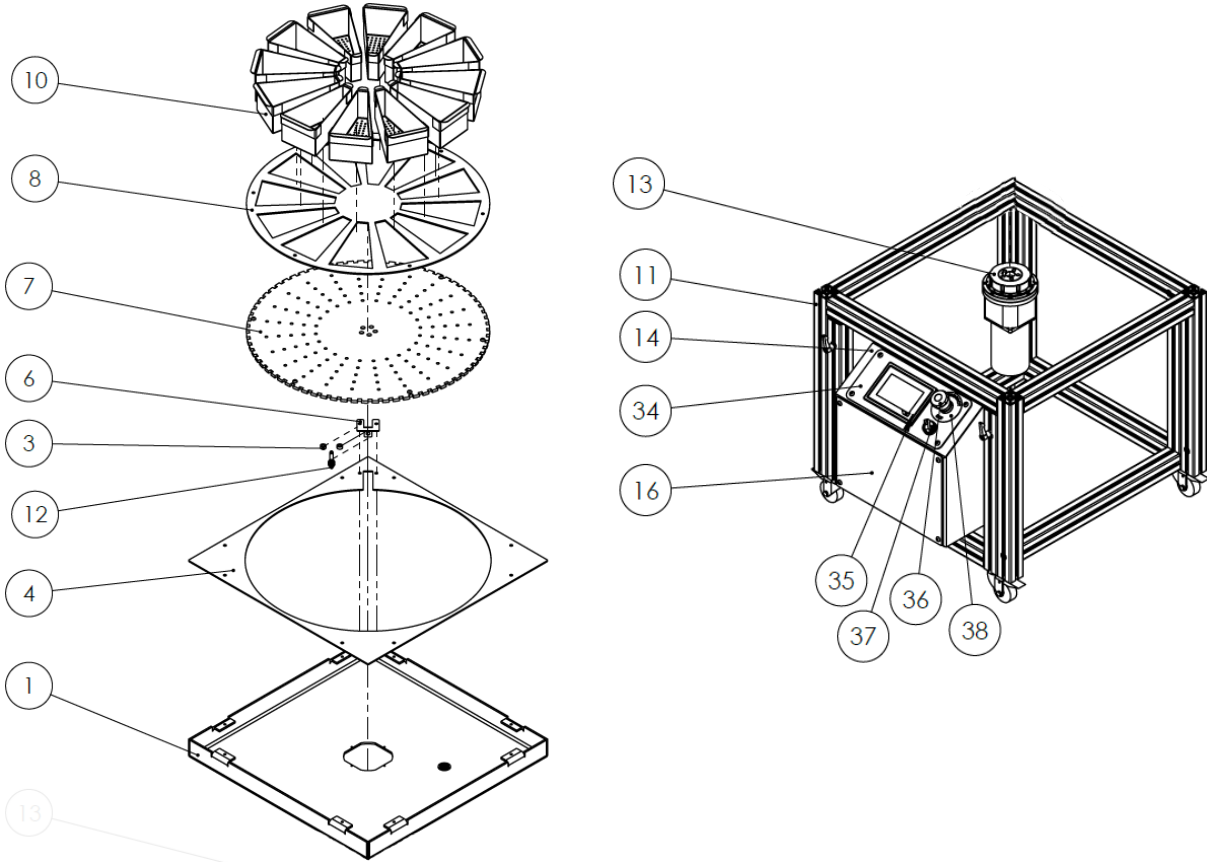
ITEM #	PART #	DESCRIPTION	QUANTITY
1	DIN RAIL 11	DIN RAIL, SLOT PATTERN DRIVEN BY LENGTH	1
2	300142	END STOP, DIN RAIL MOUNT	2
3	ST-103	ELECTRICAL BACK PANEL	1
4	1X1120002	CIRCUIT BREAKER, 2 POLE, 5A	1
5	2004-1401	TERMINAL BLOCK, 4 CONDUCTOR	8
6	2004_402_HI	2 POLE TERMINAL JUMPER	4
7	2004-1407	TERMINAL BLOCK, 4 CONDUCTOR, GROUND	2
8	PADP01C	MOTOR CAPACITOR WITH MOUNT	1
9	300081	WDR-120 SERIES, 120 WATT DIN RAIL 24VDC	1
10	858-304	SPDT RELAY, 4 CHANNEL	1
11	X20BM01	POWER BUS MODULE WITH SEPARATION	1
12	X20BR7300	X2X BUS RECEIVER	1
13	1X1010011	STANDARD TERMINAL BLOCK, 12X	1
14	X20BM11	X20 BUS RECEIVER	1
15	X20DM9324	24VDC DIGITAL OUTPUT MODULE, 2 CH, SOURCING	1
16	X20TB12	STANDARD TERMINAL BLOCK, 12X	1

# ST-15 ASSEMBLY



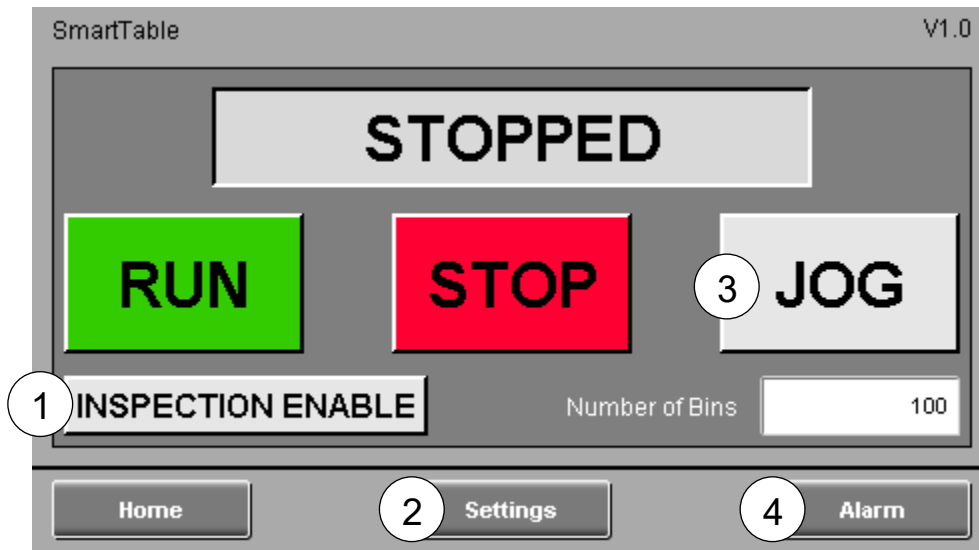
ITEM #	PART #	DESCRIPTION	QUANTITY
1	ST-15-101	COLLECTION PAN	1
3	94669A169	SENSOR MOUNT SPACER	2
4	ST-15-102	COLLECTION PAN COVER	1
6	ST-113	SENSOR MOUNT	1
7	ST-15-110	COLLECTION BIN	6
9	ST-15-WB-V2	WHEELED BASE	1
10	130-0729-115	GEARED AC MOTOR W/ BRAKE, 110VAC, 729:1	1
11	ST-15-103	BIN BASE PLATE	1
12	ST-15-106	BIN RETAINING PLATE	1
13	ST-101	ELECTRICAL ENCLOSURE	1
15	ST-102	ELECTRICAL COVER	1
33	ST-114	HMI ESTOP MOUNT	1
34	1X1010025	C30 TFT WQVGA 4.3 L/B 2X CAN	1
35	300099	EMERGENCY STOP	1
36	A22NS_2B	SELECTOR SWITCH, 2 POSITION, MAINTAINED	1
37	300100	EMERGENCY STOP NAME PHENOLIC PLATE	1
38	BES_M08EH1	PROXIMITY SENSOR, 6MM SENSING	1

# ST-22 ASSEMBLY

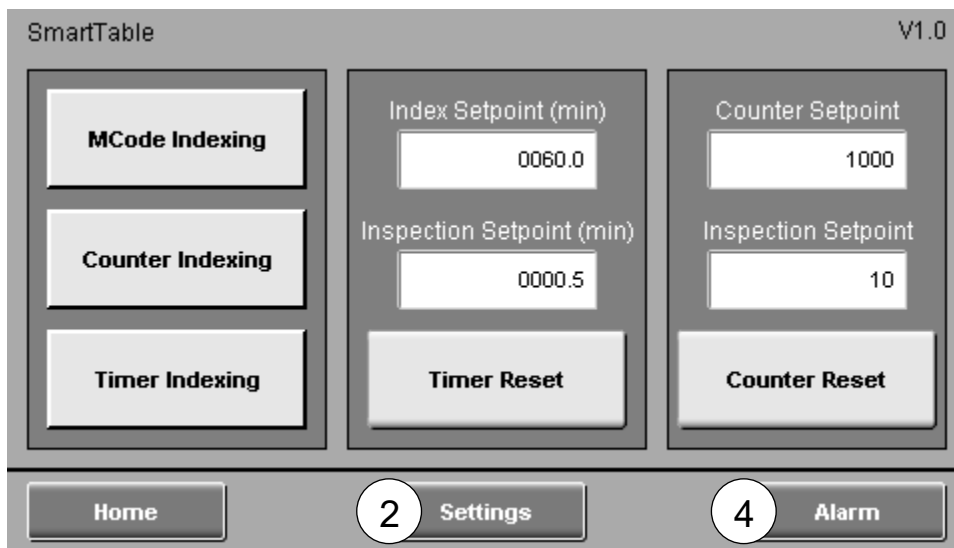


ITEM #	PART #	DESCRIPTION	QUANTITY
1	ST-22-101	COLLECTION PAN	1
3	94669A169	SENSOR MOUNT SPACER	2
4	ST-22-102	COLLECTION PAN COVER	1
6	ST-113	SENSOR MOUNT	1
7	ST-22-103	BIN BASE PLATE	1
8	ST-22-106	BIN RETAINING PLATE	1
10	ST-22-110	COLLECTION BIN	12
11	ST-22-WB	WHEELED BASE	1
12	BES_M08EH1	PROXIMITY SENSOR, 6MM SENSING	1
13	130-0729-115	GEARED AC MOTOR W/ BRAKE, 110VAC, 729:1	1
14	ST-101	ELECTRICAL ENCLOSURE	1
16	ST-102	ELECTRICAL COVER	1
34	ST-114	HMI ESTOP MOUNT	1
35	1X1010025	C30 TFT WQVGA 4.3 L/B 2X CAN	1
36	300099	EMERGENCY STOP	1
37	A22NS_2B	SELECTOR SWITCH, 2 POSITION, MAINTAINED	1
38	300100	EMERGENCY STOP NAME PHENOLIC PLATE	1

# HMI NAVIGATION

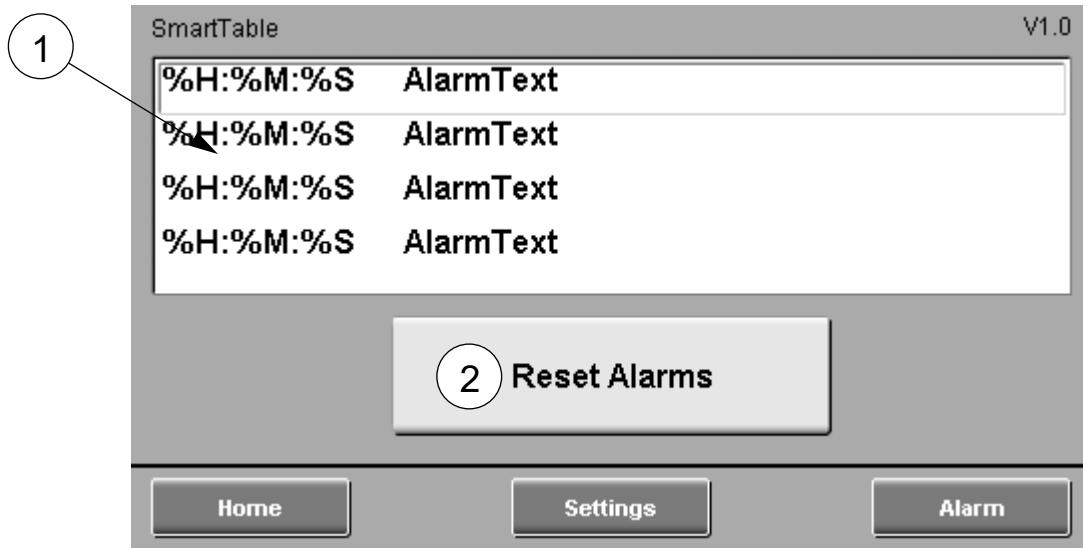


ITEM	NAME	FUNCTION
1	INSPECTION FEATURE	IN ADDITION TO THE MAIN MODE SETTING, THE DIAL WILL ALTERNATE INDEXING WHEN THE INSPECTION TIMER/COUNTER HAS BEEN REACHED.
2	SETTINGS	DISPLAYS THE MODE SELECTION AND SETTINGS SCREEN
3	JOG	JOGS THE DIAL SO THAT THE BINS CAN BE ALIGNED WITH THE PARTS CONVEYOR.
4	ALARM	DISPLAYS THE CURRENT ALARMS BEING DETECTED





# ALARMS



ITEM	NAME	FUNCTION
1	ALARM DISPLAY	DISPLAYS THE CURRENT ALARMS BEING DETECTED
2	ALARM RESET	PRESSING THIS BUTTON WILL ONLY CLEAR ALARMS FOR WHICH THE ROOT CAUSE HAS BEEN CORRECTED.

## ALARM CODES

CODE	NAME	CAUSE
1	A101	RACK 1 SLOT 1 IN ALARM
2	A102	RACK 1 SLOT 2 IN ALARM
3	A103	E-STOP TRIPPED

# WARRANTY

PressureTech warrants that within 12 months from original shipment, if its products are operated by the original specified user: PressureTech will repair or replace, at its option, free of charge except freight, FOB shipping point, any parts it finds nonconforming on these conditions:

- On request, user promptly allows seller to inspect, and user returns all requested parts to PressureTech's plant.
- User has operated and maintained products in accordance with PressureTech's maintenance and operational literature and good business practice.
- Products have not been misused, abused, damaged by accident or altered without PressureTech's written consent.
- User employs trained maintenance and operating personnel.
- Buyer meets all payment obligations.

PressureTech warrants products manufactured by others to the extent warranted by their original manufacturers. Parts which have expected life shorter than one year under normal usage are excluded.

USED PRODUCTS ARE SOLD AS IS. PRESSURETECH MAKES NO WARRANTY FOR USED PRODUCTS EXCEPT AS TO TITLE. BUYER MAY INSPECT AND TEST BEFORE SHIPMENT AND ACCEPTS USED PRODUCTS ON THESE TERMS.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL, OR IMPLIED, (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE).



New England Tool Corp.

161 Sanrico Drive

Manchester, CT 06042

tel.: 860-783-5555

fax: 860-783-5552

email: [sales@pressuretechsystems.com](mailto:sales@pressuretechsystems.com)

[www.PressureTechSystems.com](http://www.PressureTechSystems.com)

