



# LOW PRESSURE, PLURAL COMPONENT PROPORTIONER

Designed  
for Spraying or Pouring  
Polyurethane Foam  
& Polyurea Coatings  
from the **SPI SYNERGY**  
Family of Products



LPG VIDEO  
MANUAL



[SPECIALTY-PRODUCTS.COM](http://SPECIALTY-PRODUCTS.COM)



PROUDLY  
made in the USA



# TABLE OF CONTENTS



MANUAL CONVENTIONS	<b>4</b>
TYPICAL EQUIPMENT INSTALLATION	<b>9</b>
COMPONENT IDENTIFICATION	<b>10</b>
INITIAL SET-UP	<b>18</b>
DAILY START-UP	<b>28</b>
SPRAY	<b>30</b>
DAILY SHUT DOWN	<b>31</b>
PRESSURE RELIEF PROCEDURE	<b>32</b>
FLUSH PROCEDURE	<b>33</b>
PROPORTIONING PUMP REPLACEMENT	<b>34</b>
PARTS MANUAL	<b>36</b>
TROUBLESHOOT	<b>42</b>
110 VOLT WIRING DIAGRAM	<b>43</b>
HITACHI AC DRIVE 100v/0.75kW	<b>44</b>
DIMENSIONS	<b>45</b>
TECHNICAL DATA	<b>46</b>
LPG™ PUMP OUTPUT CHART	<b>47</b>
LIMITED LIFETIME WARRANTY	<b>48</b>

LPG™ INTRODUCTION  
VIDEO




# MANUAL CONVENTIONS

## WARNING



A warning alerts you to possible serious or fatal injury if you do not follow instructions.



Symbols, such as respiratory hazard (  ), alert you to a specific hazard and direct you to read the indicated hazard warnings on page 4 and 5.

## CAUTION



A caution alerts you to possible equipment damage or destruction, if you do not follow instructions.

## NOTE



A note indicates additional helpful information.

## ISOCYANATE HAZARD



Read SPI's warnings and material MSDS to know the specific hazards of isocyanates. Use equipment in a well-ventilated area. Wear respirator, gloves, and protective clothing when using isocyanates.

MANUAL CONVENTIONS  
& SAFETY VIDEO



# WARNING



## SKIN INJECTION HAZARD

High-pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation.

### SEEK IMMEDIATE SURGICAL TREATMENT:



- » DO NOT point the gun at anyone or at any part of the body.
- » DO NOT put your hand or fingers over the gun fluid nozzle.
- » DO NOT stop or deflect leaks with your hand, body, glove, or rag.
- » DO NOT “blow back” fluid; this is not an air spray system.
- » Follow Daily Shut Down Procedure chapter, when you stop spraying and before cleaning, checking, or servicing equipment.
- » Use lowest possible pressure when flushing, priming, or troubleshooting.
- » Close gun manual valves when not spraying.
- » Tighten all fluid connections before operating the equipment.
- » Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately. High pressure hose cannot be re-coupled; replace the entire hose.



## FIRE, EXPLOSION & ELECTRIC SHOCK HAZARD

Solvent and fumes in work area can ignite or explode. High voltage components can cause electric shock. To help prevent fire, explosion, and electric shock:



- » Shut off main power switch and wait 5 minutes before opening LPG™ top cabinet door.
- » All electrical wiring must be done by trained and qualified personnel and comply with all local codes.
- » Use equipment only in well ventilated area.
- » Eliminate all ignition sources, such as pilot lights, cigarettes and plastic drop cloths (potential static arc).
- » DO NOT plug or unplug power cords or turn lights on or off when flammable fumes are present.
- » Keep the work area free of debris, including solvents, rags and gasoline.
- » Hold gun firmly to side of grounded pail when triggering into pail.
- » If there is static sparking or you feel a shock, stop operation immediately. DO NOT use equipment until you identify and correct the problem.
- » To avoid chemical reaction and explosion, DO NOT use trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminium equipment.
- » Always use provided GFCI 20AMP Circuit Breaker for LPG™ Hose Heat power cord connection.

## WARNING



### EQUIPMENT MISUSE HAZARD

Misuse can cause serious injury or death.



- For professional use only.
- Use equipment only for its intended purpose. Call SPI technical support (1-800-627-0773) for information.
- Read manuals, warnings, tags, and labels before operating equipment. Follow instructions.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- DO NOT alter or modify equipment. Use only SPI parts and accessories.
- DO NOT exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Data chapter.
- Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals.
- Route hoses and cables away from traffic areas, sharp edges, moving parts and hot surfaces.
- DO NOT use hoses to pull equipment.
- Comply with all applicable safety regulations.



### BURN HAZARD

This equipment can be used with heated fluid, which can cause equipment surfaces to become very hot. To avoid severe burns:

- DO NOT touch hot fluid or equipment.
- Allow equipment to cool completely before touching it.
- Always wear gloves if fluid temperature exceeds 110°F (43°C).



### TOXIC FLUID OR FUMES HAZARD

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed:

- Read Material Safety Data Sheet (MSDS) to know the specific hazards of the fluids you are using.
- Store hazardous fluid in approved containers and dispose of it according to applicable guidelines.



### PERSONAL PROTECTIVE EQUIPMENT

You must wear proper protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury and inhalation of toxic fumes. This equipment includes but is not limited to:

- Protective eye wear.
- Gloves, clothing and respirator as recommended by the MSDS.

# OPERATOR NOTES



---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

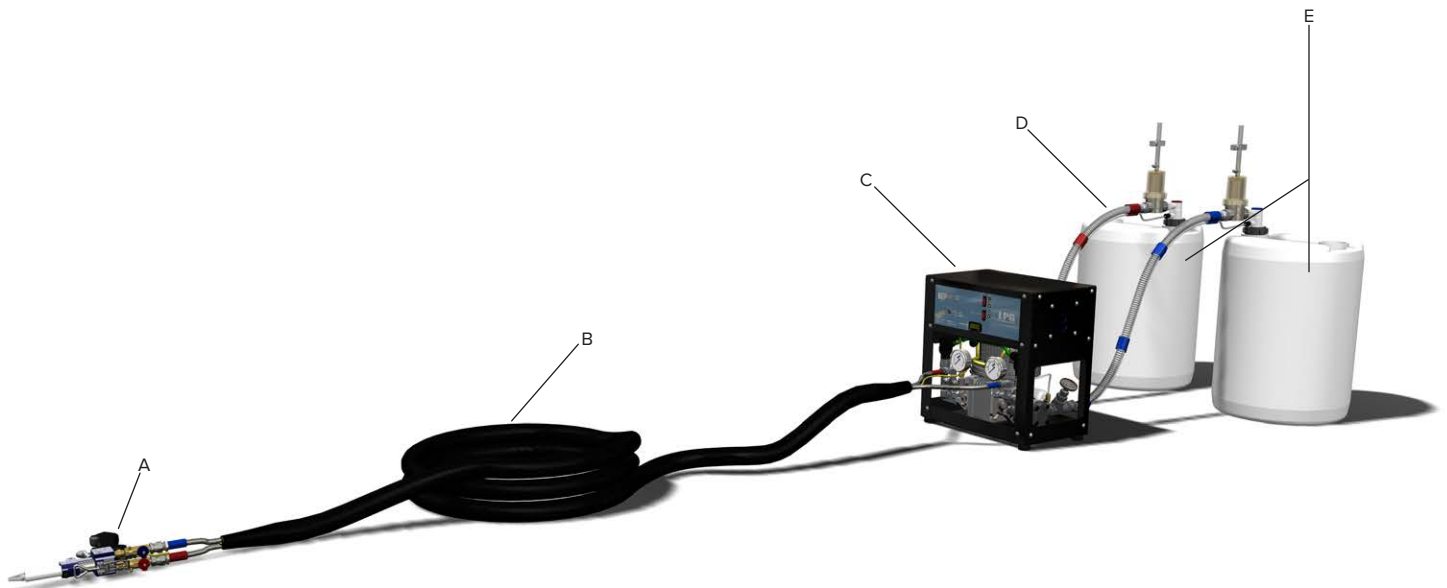
---

---

---







## EQUIPMENT

- LOCK N LOAD™ Gun **A**
- 25' or 50' Heated Spray Hose **B**
- LPG™ Proportioner **C**
- LPG™ Transfer Assembly with Riser Tube and Strainer **D**
- Synergy Series Product Drums **E**



10 GALLON DRUM SET

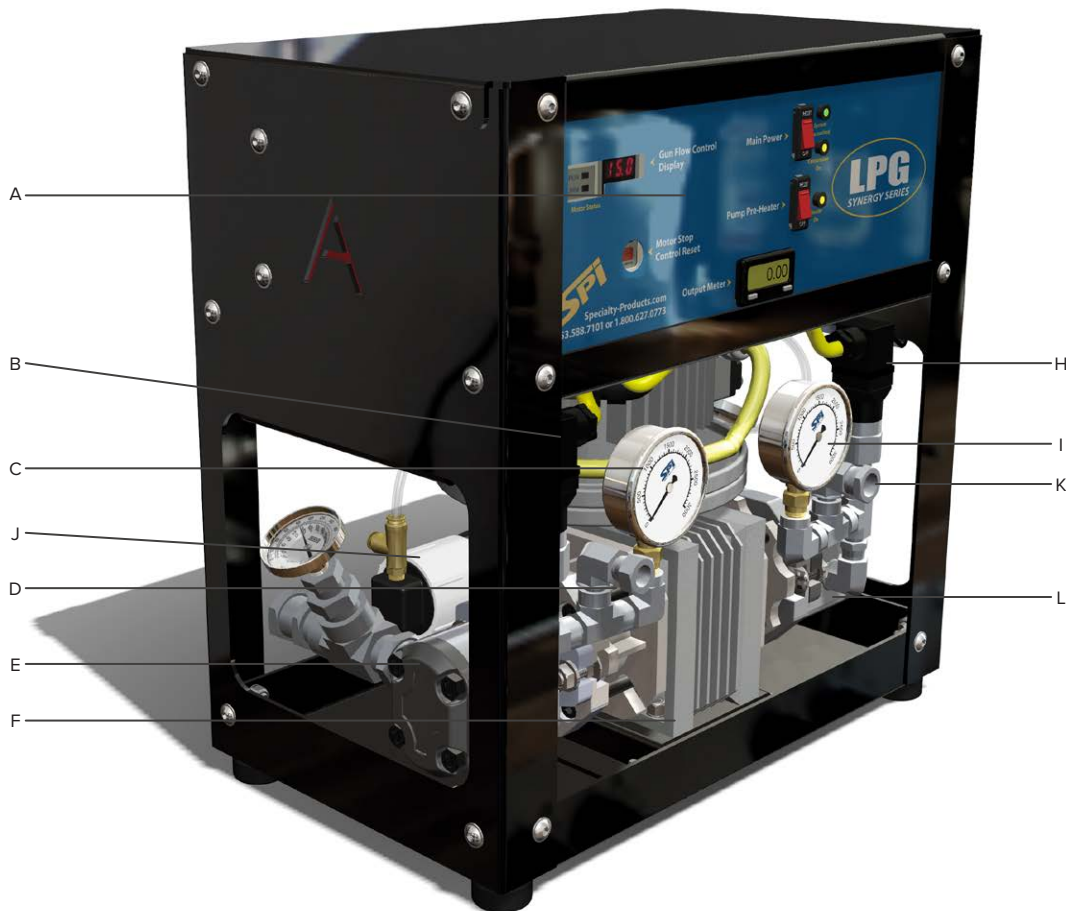


30 GALLON DRUM SET



100 TO 110 GALLON DRUM SET

# COMPONENT IDENTIFICATION



## LPG™

Operating Control Panel  
(See page 10)

**A** component Over-Pressure  
Safety Switch

**A** component Pressure Gauge

**A** component Hose Fluid  
Pressure Fitting

**A** component Proportioning Pump

1 HP AC Motor

Low Pressure Air Compressor  
(Not Shown)

**A**

**B**

**C**

**D**

**E**

**F**

**G**

**B** component Over-Pressure  
Safety Switch

**B** component Pressure Gauge  
Desiccant Air Dryer

**B** component Hose Fluid  
Pressure Fitting

**B** component Proportioning Pump

**H**

**I**

**J**

**K**

**L**

### A & B PRESSURE GAUGE

The LPG™ incorporates two pressure gauges to indicate the dynamic back pressure of each component while the machine is running. The amount of back pressure at different motor speed settings will vary based on; length of spray hose, temperature/viscosity of the fluid product, and/or type of static-mixer.

The pressure gauges can also be used to identify the cause of a motor controller fault code. See Troubleshooting chapter of this manual.

Unlike high-pressure, plural component spray equipment, the LPG™ does not build and maintain a static pressure; its unique on-demand delivery system will only generate flow, at the spray gun, with user input.



### A & B OVER PRESSURE SAFETY SWITCH

In addition to a visual indication of the pressure of either component, via the pressure gauges, the LPG™ also incorporates an electrical overpressure safety circuit to monitor for unsafe conditions. This safety circuit consists of two normally closed pressure switches monitored by the motor controller. In the event either component exceeds 1000 psi, the motor controller will stop the motor and display the fault code EF-2 on the Gun Flow Control display.



### LOW PRESSURE AIR COMPRESSOR

The Low Pressure Air Compressor supplies 5-7 psi of dry air to the A and B component containers. Pressure to the containers is regulated by the material supply pressure switch.



### MATERIAL SUPPLY AIR DRYER

Due to the moisture sensitivity of the A component air to the A component container is directed through the Air Dryer. The Air Dryer contains silica crystal to absorb moisture from the air. The color of serviceable silica crystal is deep blue. As the crystal absorbs moisture the crystal will change to pink. The silica crystal may be regenerated up to three times in an electric oven using the following method:

Remove the 2" threaded plug, and foam filter from the end of the dryer.

Empty crystals on to a cooking sheet and distribute evenly.

Bake in an electric oven at 250° for up to 8 hours until crystal have returned to a deep blue color.

Re-fill tube and reinstall filter and 2" threaded plug.



If browning occurs, the silica must be replaced.

# COMPONENT IDENTIFICATION



## OPERATING CONTROL PANEL

- |                               |          |
|-------------------------------|----------|
| Gun Flow Control Display      | <b>A</b> |
| Motor Stop   Control Reset    | <b>B</b> |
| Main Power Switch             | <b>C</b> |
| Pump Pre-Heater Switch        | <b>D</b> |
| Front Panel Indication Lights | <b>E</b> |
| Output Meter                  | <b>F</b> |

## GUN FLOW CONTROL DISPLAY

Displays the current flow setting of the Motor Controller. Also displays any error code identified in the Troubleshooting chapter of this manual.

## MOTOR STOP | CONTROL RESET

The Motor Stop/Control Reset button functions as an alternate method to discontinue flow to the spray gun. It also functions as a control system reset in the event that there has been an error code. The reset function will only reset the controller once the fault has been cleared.

## MAIN POWER SWITCH

Controls the application of 115 Volt AC power to the LPG™. Once actuated, the on-board motor controller will turn on, the on-board air compressor will begin to pressurize the material supply system, and power will be supplied to the Pump Pre-Heater Switch.



The Main Power Switch also serves as an over current safety switch. It will trip if an unsafe condition exists.

## PUMP PRE-HEATER SWITCH

This switch will activate the 80 watt pump pre-heater located on the B component proportioning pump. Once actuated, the heater will begin to apply heat and will automatically cycle to maintain 130 degrees Fahrenheit.



The pump pre-heater is intended to pre-heat motor gear box in colder climates to reduce initial system load. It is not intended to heat the B component product during processing.

The Main Power Switch must be engaged to supply power to the Pump Pre-Heater. The Pump Pre-Heater Switch also acts as an over current protection device and will disengage if an unsafe condition exists.

## FRONT PANEL INDICATION LIGHTS

### SYSTEM PRESSURIZED:

The green light indicates that the material supply system is pressurized, and the on-board supply air compressor is off.

### COMPRESSOR ON:

The yellow light indicates that the on-board supply air compressor is running and building pressure in the material supply system/material containers.

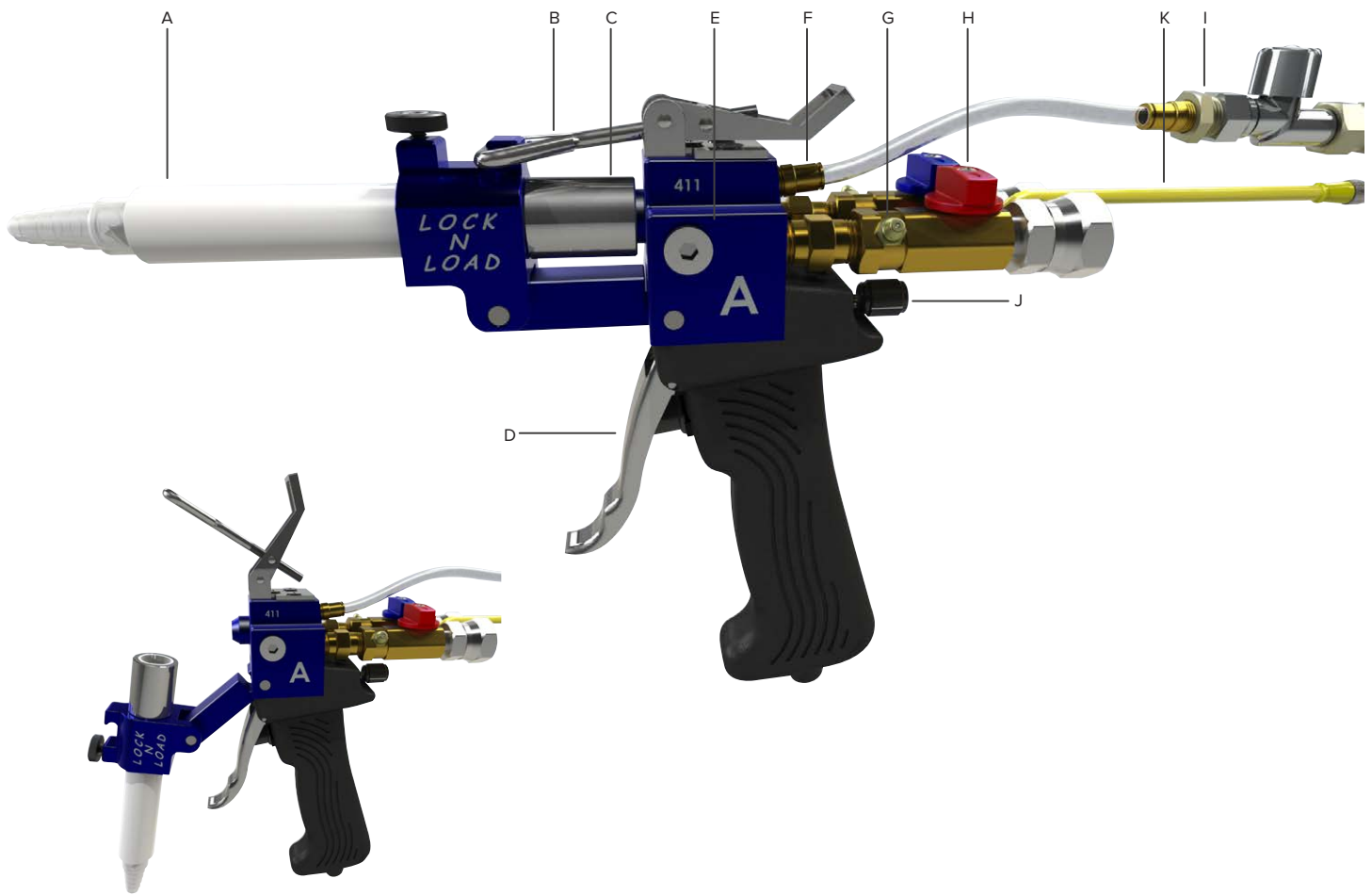
### HEATER ON:

The yellow light indicates that the Pump Pre-Heater is on and will apply heat to the pump-line. It will cycle on and off to maintain a pre-set temperature.

## OUTPUT METER

Counts plural component product output, in tenths of gallons, processed through the machine. It is powered by an internal, replaceable battery, which has an average life of seven years. Pressing the button in the lower right corner will zero the Output Meter. The numerical quantity displayed is total material output (example: 1 gallon displayed = 0.5 gal of A component + 0.5 gal B component).

# COMPONENT IDENTIFICATION



## LOCK N LOAD™ GUN

Static Mixer Safety Shroud  
 Mixer Retainer Latch I Lock  
 Mixer Retainer  
 Gun Dispensing Trigger  
 Fluid Block  
 Nucleating Air Line Fitting

<b>A</b>	Manual Valve Grease Zerk	<b>G</b>
<b>B</b>	Fluid Manual Shut-off Valve	<b>H</b>
<b>C</b>	Nucleating Air Flow Control Valve	<b>I</b>
<b>D</b>	Flow Control Dial	<b>J</b>
<b>E</b>	Control Cable	<b>K</b>
<b>F</b>		

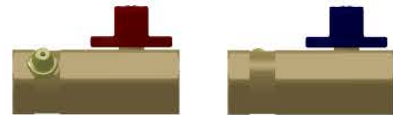
### MIXER RETAINER LATCH | LOCK

The LOCK N LOAD™ mixer retainer latch provides an efficient means to quickly remove and replace the static mixer. The latch is adjustable to provide the optimum seal between the static mixer and fluid block.



### FLUID MANUAL SHUT-OFF VALVE

The fluid manual shut-off valves isolate the A and B component product from the heated hose assembly and gun block. They provide a means to safe the gun while not actively spraying.



### NUCLEATING AIR FLOW CONTROL VALVE | FLOW CONTROL DIAL

Spray pattern control is accomplished by making adjustments to both the Nucleating Air Flow Control Valve and the Flow Control Dial. A spray pattern can be fine-tuned by making minor adjustments to both, and visually monitoring the spray pattern.

Flow Control Dial can be set and locked to a desired control speed. Using a 5/16 wrench to tighten down the lock nut on the control speed shaft.



# COMPONENT IDENTIFICATION

## STATIC MIXERS



**12" ROUND  
SPRAY & POUR POLYUREA**



**7" ROUND  
SPRAY & POUR FOAM**



**9" SQUARE  
JOINT FILL & POUR POLYUREA**





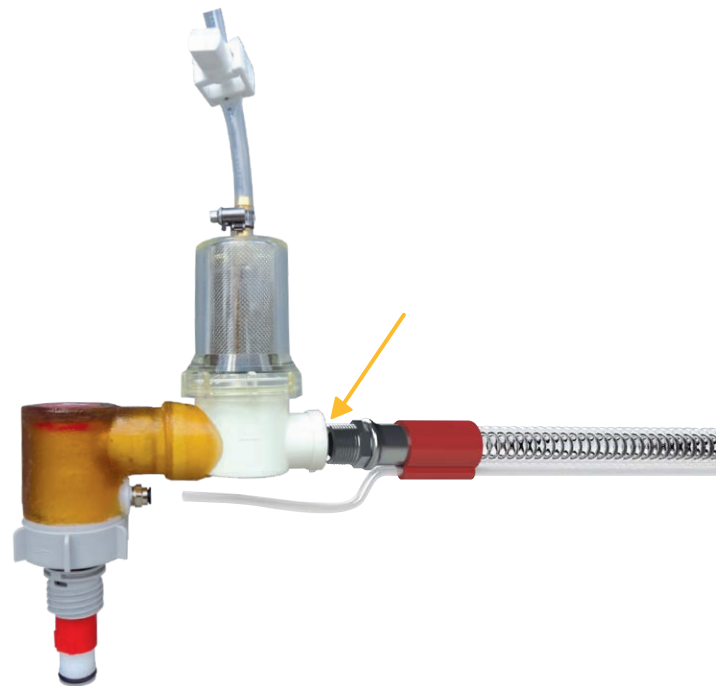
# INITIAL SET-UP



Heat material supply containers to the required temperatures in accordance with the material drum labels and technical data prior to beginning initial set-up. The time required to reach the material optimum application temperature will vary based on, ambient conditions, starting temperature volume of material in the containers, and the method used to heat the material containers.

## 1. LOCATE LPG™

- 1.1. Position LPG™ on a level surface.
- 1.2. DO NOT expose LPG™ to moisture.



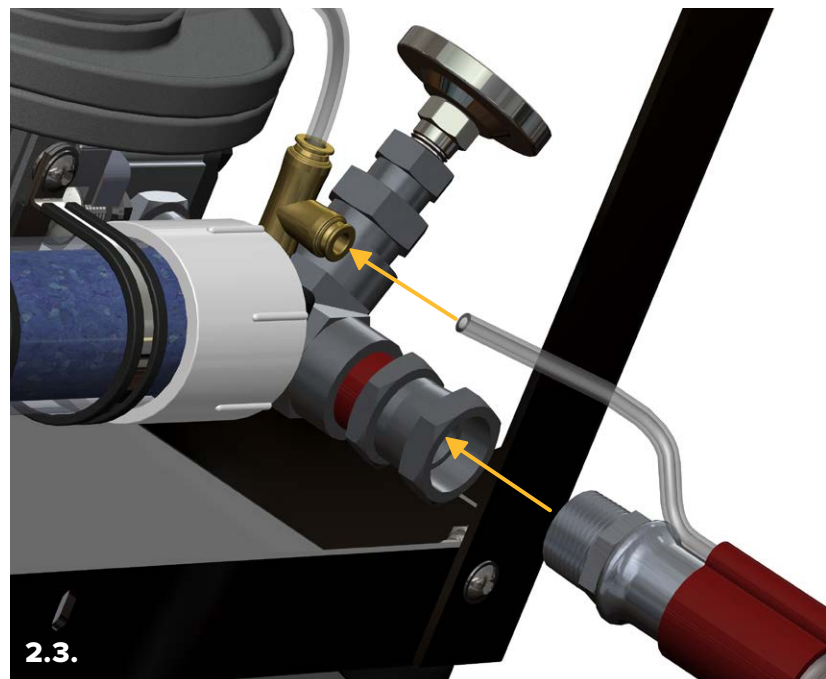
2.1.

## 2. CONNECT COMPONENT TRANSFER HOSES

- 2.1. Apply teflon tape to threads identified in illustration.
- 2.2. Connect the **A** component transfer hose to the **A** component proportioning pump inlet fitting.
- 2.3. Connect the **A** component airline to the outlet of the air dryer.



Placement of the **A** and **B** component supply containers must not cause any sharp bends or excessive pressure on the component transfer hose assembly. The component transfer hose must be as straight as possible with a slight downward angle toward the LPG™ inlets.



2.3.



INITIAL SET-UP  
VIDEO

2.4. Locate the **A** side fluid container near the LPG™ to install the **A** side transfer assembly.

2.5. Locate the appropriate material supply riser tube and insert into the **A** side insert assembly. Install the supply riser tube that is the correct length depending on which LPG™ container you will be using. (5, 15 & 55 gal)



**2.5.**



Apply the supplied Super Lube [or equivalent] to the visible seals and threads of all **A** side components.

2.6. Insert the quick disconnect receiver/riser tube assembly into the material container.



Use Blue Drum wrench provided in SPI LPG™ tool kit to **hand tighten only**.



**2.6.**

# INITIAL SET-UP

2.7. Remove **A** side insert storage plug.



The bottom of each LPG™ fluid strainer/air trap must be positioned at a minimum of 4 inches above the top of the LPG™ proportioning pump inlet.



2.8. Thread the **A** side combo coupler into the **A** side insert [aligning keys with key ways] until the connector is hand tight.



Over tightening the transfer quick disconnect can cause an air leak which will not allow the transfer supply system to properly pressurize as designed.



2.9. Repeat steps 2.1 through 2.8 for the **B** side transfer assembly.



### 3. CONNECT SPRAY HOSE

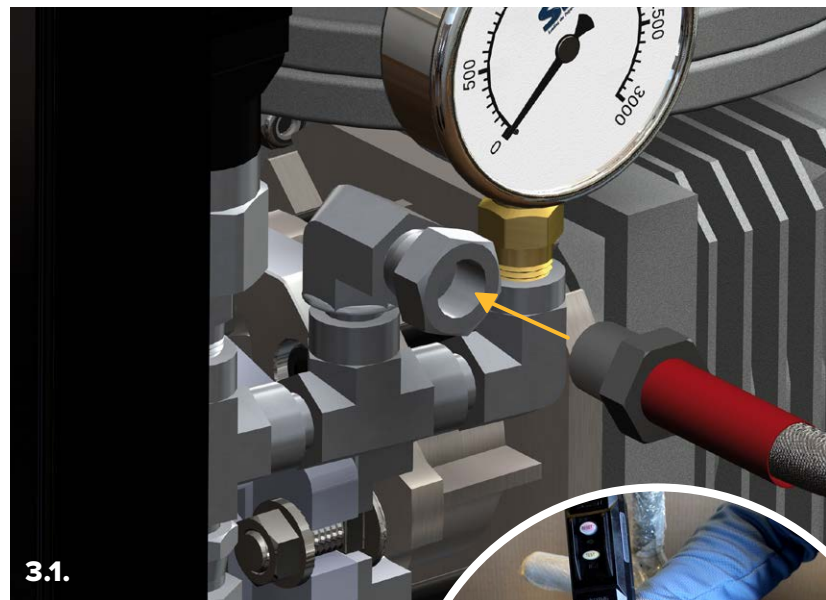
3.1. Connect the **A** component pressure hose to **A** component proportioning pump outlet.



Apply the supplied superlube to **A** side threads for easy removal of LPG™ Hose



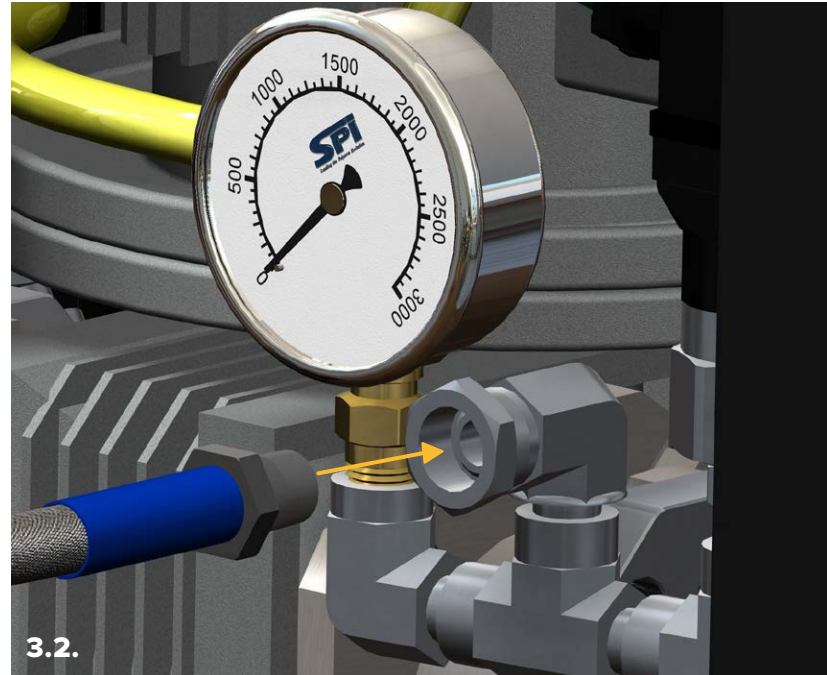
Attach GFCI 20AMP Circuit Breaker to power cord on LPG™ Hose. This provides protection within the LPG™ Hose Heat Circuit.



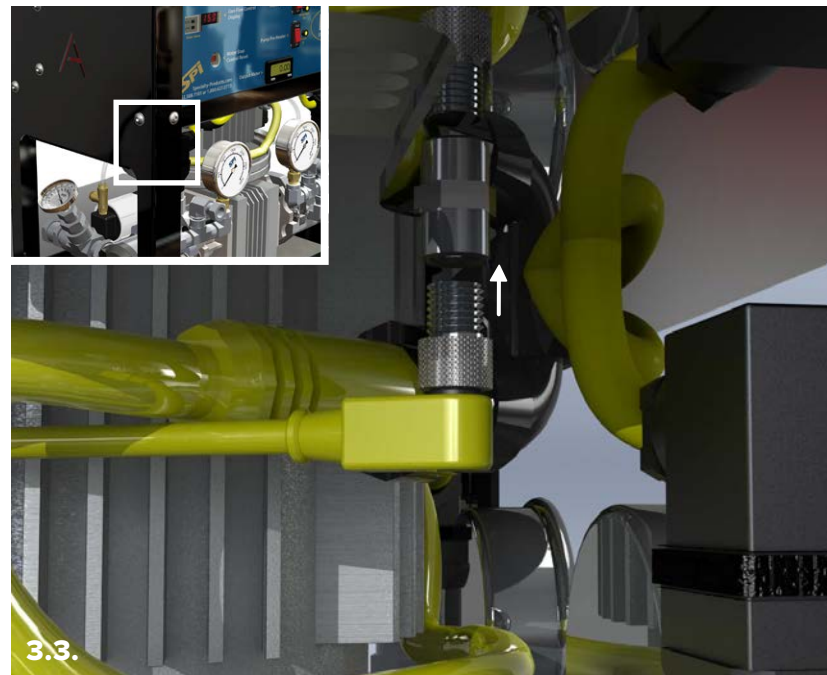
**NOTE**

# INITIAL SET-UP

3.2. Connect the **B** component pressure hose to the **B** component pump outlet.



3.3. Connect the heated hose machine control cable plug to the LPG™ control receptacle located in the underside of the enclosed area of the LPG™ proportioner. Align key with keyway and thread plug into the receptacle.



#### 4. CONNECT LOCK N LOAD™ SPRAY GUN

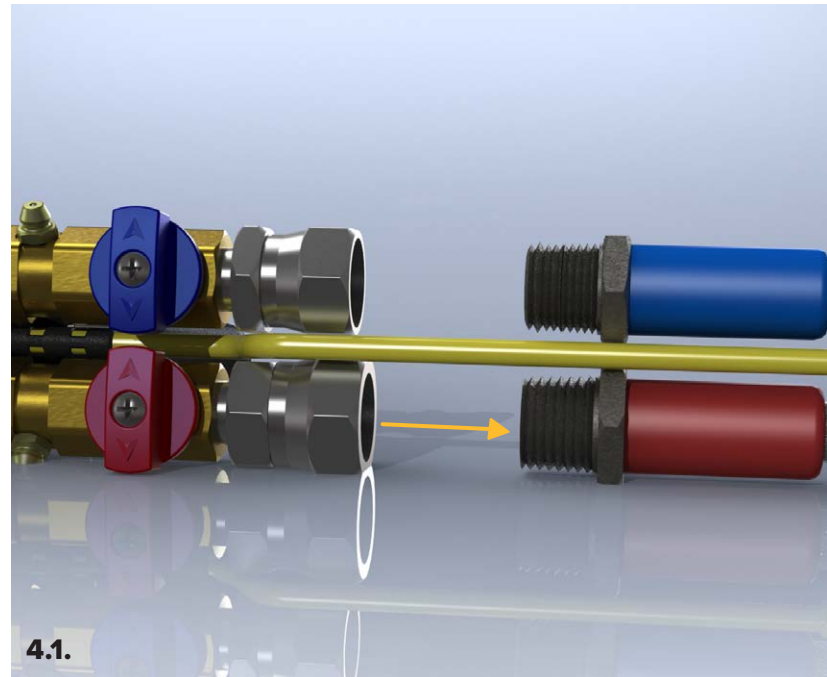
4.1. Connect the **A** component pressure hose to the **A** component fluid fitting on the LOCK N LOAD™ gun block.



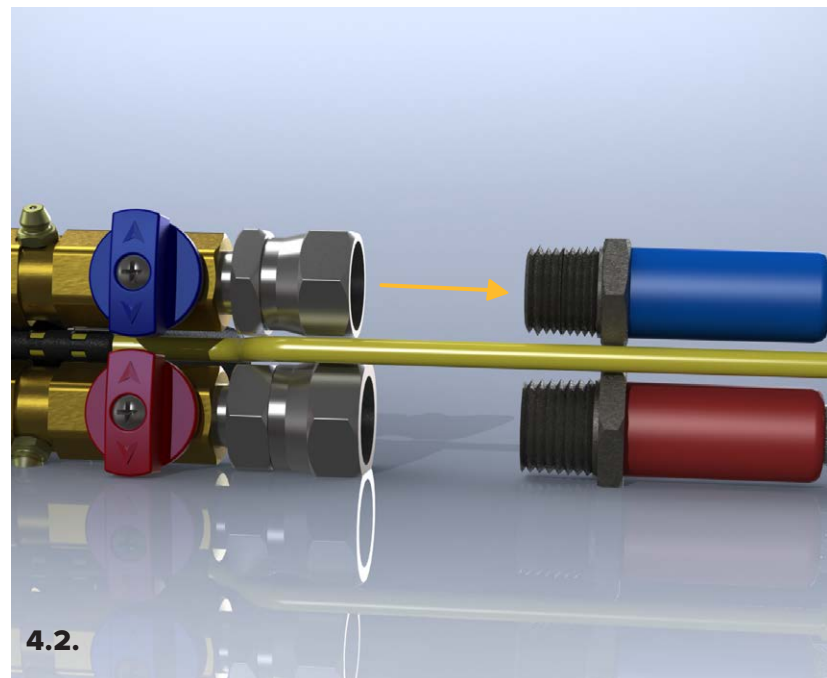
DO NOT kink spray hose or coil tighter than a three foot diameter.



Apply the supplied superlube to **A** side threads for easy removal of LPG™ Hose

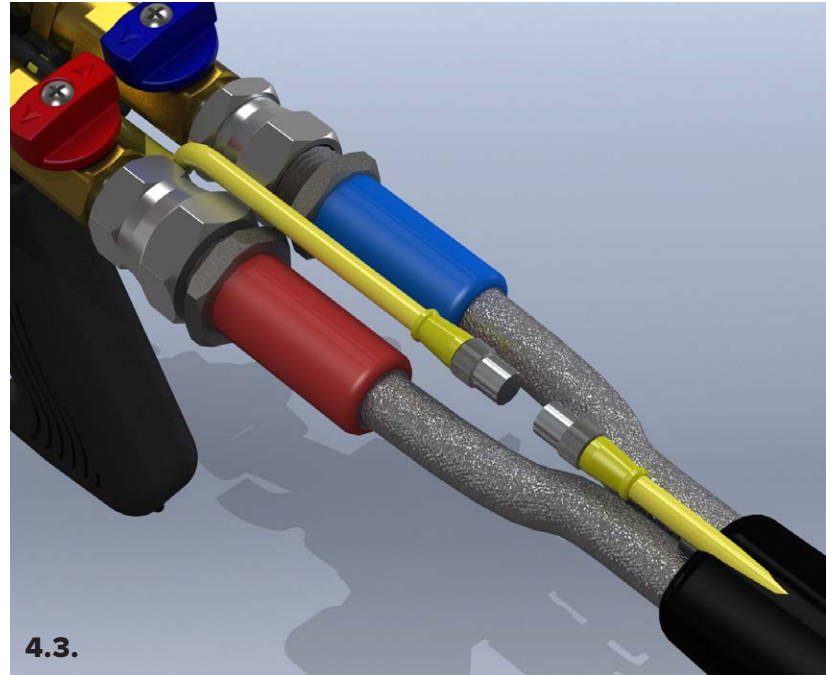


4.2. Connect the **B** component pressure hose to the **B** component fluid fitting on the LOCK N LOAD™ gun block.



# INITIAL SET-UP

- 4.3. Connect the LOCK N LOAD™ Gun dispensing/flow control dial to the hose electrical data cable. Align with key way and tighten.



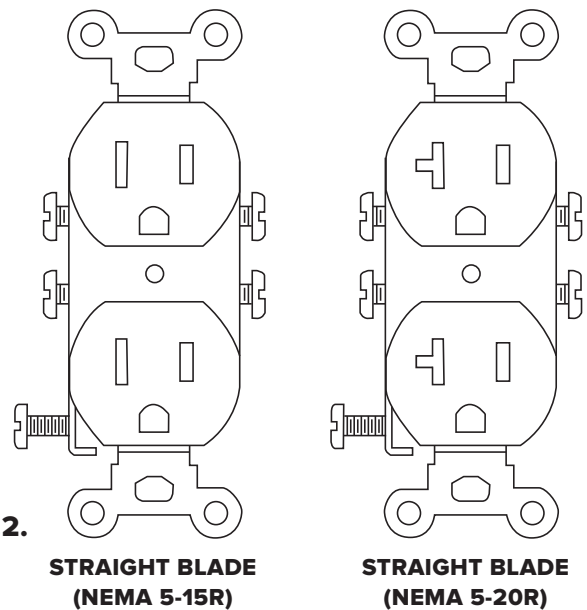
## 5. POWER APPLICATION

- 5.1. Ensure the LPG™ main power switch and the gun dispensing trigger are in the off position.
- 5.2. Connect the LPG™ power cord to any standard NEMA 5-15 or 5-20 receptacle. The LPG™ uses a standard NEMA 5, 3-wire plug, rated a maximum of 125 volts.



Under certain operating conditions, the higher amperage NEMA 5-20 receptacle may be required to attain the desired product flow rate. The LPG™ does not require any additional configuration for operating from a 20 amp circuit.

**The LPG™ will not operate with most GFCI receptacles.**







If necessary, run fluid agitator in the **B** component container prior to proceeding. Reference the Synergy Series Product Technical Data Sheet and container label for the product you are dispensing for further instructions.

5.3. The LPG™ has a self-contained low-pressure air compressor; this compressor supplies 5 psi of moisture free air to the **A** and **B** component containers to supply the LPG™ proportioning pumps with material. The compressor will begin to build pressure automatically when main power is turned on. The air compressor will shut off once 5 psi of air pressure is in the material containers, and continue to cycle to maintain pressure. The time that it will take to reach the 5 psi set point will vary based on the size and fluid level in the **A** and **B** component containers. Proceed once the air compressor has started its cycle on-off.



An independent air compressor may be required depending on your application. Please consult your SPI Sales Representative for more information.

# INITIAL SET-UP

## 6. BLEED AIR FROM FLUID SYSTEM

- 6.1. Open the air release crimp valve on the **A** component fluid strainer/air trap.
- 6.2. Observe as the fluid begins to rise in the fluid strainer/air trap and close crimp valve when fluid is 1 to 1.5 inches from the top of the clear strainer housing.
- 6.3. Repeat steps 6.1. and 6.2. for **B** component.




It is imperative for proper application that each **A** and **B** component side has air bled from each fluid strainer/air trap. Visually monitor to ensure each fluid housing remains full of product during operation.

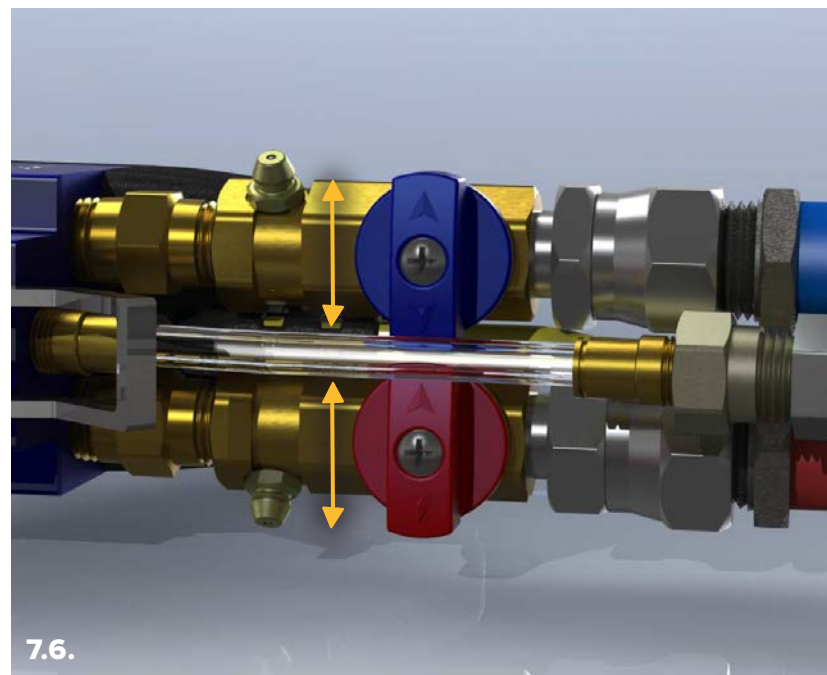
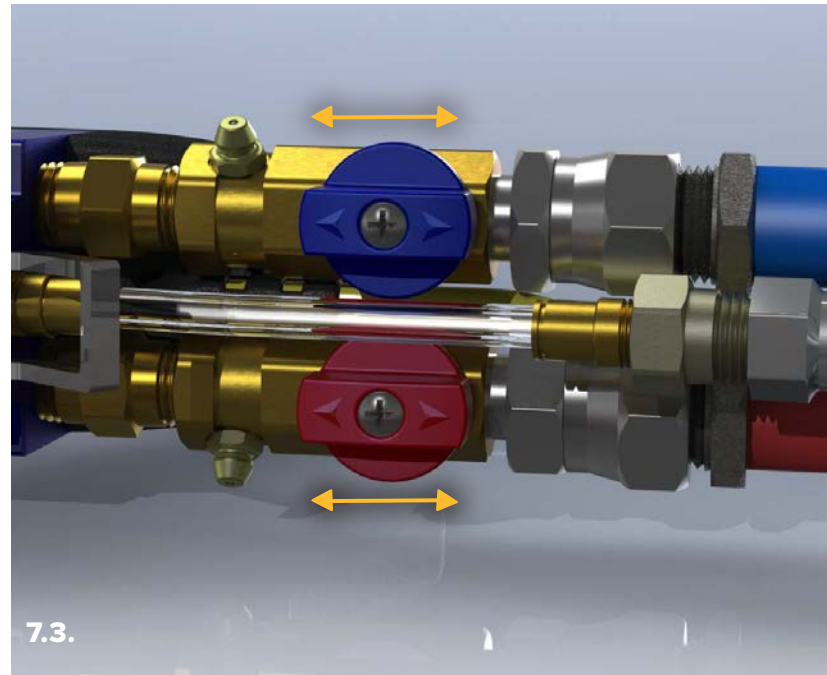


## 7. PURGE SPRAY HOSE.

- 7.1. Position LOCK N LOAD™ Gun over a properly grounded waste container. Release and pivot open LOCK N LOAD™ Gun.
- 7.2. Release mixer retainer latch and pivot mixer shroud block away from fluid block.
- 7.3. Ensure the **A** and **B** component manual valves are in the open position (arrows pointing to gun and hose are open, and perpendicular is closed).
- 7.4. Adjust the material flow control dial clockwise to approximately 30 Hertz (Indicated on the Gun Flow Control Display operating panel).
- 7.5. Trigger the gun with the nozzle over the properly grounded empty waste container.

 May take several minutes to dispense fluid material to the gun, depending on length of hose as well as temperature of the fluid being purged.

- 7.6. Once there is a steady flow of both **A** and **B** components with no air bubbles, de trigger the gun. Turn both fluid manual valves to the closed position.
- 7.7. Proceed to daily start-up.



# DAILY START-UP

1. Ensure that the **A** and **B** component containers are at the proper temperature by viewing the thermometer indicators attached to each product container label.

Temperature requirements for material containers can be found on the product container label on the material containers, as well as on the **Synergy Series Product Technical Data Sheet**.



Ensure **A** and **B** component temperatures are at required temperature by observing LPG™ fluid inlet thermometers during equipment operation. (See step 6.3)

SEAMLESS SOLUTIONS FOR OVER 40 YEARS

### EXAMPLE PRODUCT LABEL

### COMPONENT A

(use with COMPONENT B at 1:1 ratio by volume)

CLASSIFICATION	GHS CLASSIFICATION	HAZARD STATEMENTS
Acute toxicity (oral)	Category 4 H302	Harmful if swallowed
Acute toxicity (inhalation)	Category 2 H315	Causes skin irritation
Acute toxicity (dermal)	Category 2 H319	Causes eye irritation
Acute toxicity (inhalation)	Category 2 H332	Harmful if inhaled
Respiratory irritation	Category 1 H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
Specific target organ toxicity (STOT), single exposure (respiratory tract)	Category 3 H350	May cause respiratory irritation
Specific target organ toxicity (STOT), repeated exposure	Category 1 H373	Causes damage to organs (respiratory tract) through prolonged or repeated exposure of inhaled

## DANGER

**PRECAUTIONARY STATEMENTS**

P201 Obtain special instructions before use

P202 Do not breathe dust/fume/gas/aerosol/vapors

P273 Do not release into the environment

P280 Wear protective gloves/protective clothing/protective footwear/protective eyewear/face protection

P303+P361+P531 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF ON SKIN: Rinse with plenty of water. Remove contaminated clothing and shoes.

P312 Call a POISON CENTER or doctor if you feel unwell.

P314 Call a POISON CENTER or doctor if you feel unwell.

P330 Rinse mouth with water.

P332 IF SKIN IRRITATED: Wash with plenty of soap and water.

P337 IF EYES IRRITATED: Rinse with plenty of water. Call a POISON CENTER or doctor if you feel unwell.

P340 Immediately call a POISON CENTER or doctor if you feel unwell.

P342+P340 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P350 Do not touch, rub or scratch affected area.

P360 Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

**PROTECTION**

P201 Obtain special instructions before use

P202 Do not breathe dust/fume/gas/aerosol/vapors

P273 Do not release into the environment

P280 Wear protective gloves/protective clothing/protective footwear/protective eyewear/face protection

P303+P361+P531 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF ON SKIN: Rinse with plenty of water. Remove contaminated clothing and shoes.

P312 Call a POISON CENTER or doctor if you feel unwell.

P314 Call a POISON CENTER or doctor if you feel unwell.

P330 Rinse mouth with water.

P332 IF SKIN IRRITATED: Wash with plenty of soap and water.

P337 IF EYES IRRITATED: Rinse with plenty of water. Call a POISON CENTER or doctor if you feel unwell.

P340 Immediately call a POISON CENTER or doctor if you feel unwell.

P342+P340 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P350 Do not touch, rub or scratch affected area.

P360 Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

**SHIELD LIFE**

**STORAGE**

TEMPERATURE

MIX RATIO

**LIQUID TEMPERATURE IN CONTAINERS**

**100 MAXIMUM NUCLEATED**

**85 OPTIMUM NUCLEATED**

**70 MINIMUM NUCLEATED**

**50 F**

**100 C**

**95 35**

**90 32**

**85 29**

**80 27**

**75 24**

**70 21**

**65 18**

**60 15**

**55 13**

**50 10**

**45 7**

**40 4**

**35 2**

**30 -1**

Green: 1 Temp

Brown: above actual

Blue: below actual

## A

**IN CASE OF EMERGENCY CALL CHEMTRAC: 800-424-9300 INTERNATIONAL 1-703-527-3687**

PROBLY MANUFACTURED BY THE GUY

FOR PROFESSIONAL USE ONLY CONTENTS LOT #

GALEONS LBS/NET MFG DATE

PROBLY MANUFACTURED BY THE GUY

SPECIALTY PRODUCTS, INC. 2410 104TH ST. CT. S, STE D LAKEWOOD, WA 98499 800 627 0773 • SPECIALTY-PRODUCTS.COM © 2018 SPECIALTY PRODUCTS, INC. REV. 11-8-18

SEAMLESS SOLUTIONS FOR OVER 40 YEARS

### EXAMPLE PRODUCT LABEL

### COMPONENT B

(use with COMPONENT A at 1:1 ratio by volume)

CLASSIFICATION	GHS CLASSIFICATION	HAZARD STATEMENTS
Acute toxicity (oral)	Category 4 H302	Harmful if swallowed
Acute toxicity (inhalation)	Category 2 H315	Causes skin irritation
Acute toxicity (dermal)	Category 2 H319	Causes eye irritation
Acute toxicity (inhalation)	Category 2 H332	Harmful if inhaled
Respiratory irritation	Category 1 H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
Specific target organ toxicity (STOT), single exposure (respiratory tract)	Category 3 H350	May cause allergy or asthma symptoms or breathing difficulties if inhaled
Specific target organ toxicity (STOT), repeated exposure	Category 1 H373	May cause respiratory irritation

## WARNING

**PRECAUTIONARY STATEMENTS**

P201 Obtain special instructions before use

P202 Do not breathe dust/fume/gas/aerosol/vapors

P273 Do not release into the environment

P280 Wear protective gloves/protective clothing/protective footwear/protective eyewear/face protection

P303+P361+P531 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF ON SKIN: Rinse with plenty of water. Remove contaminated clothing and shoes.

P312 Call a POISON CENTER or doctor if you feel unwell.

P314 Call a POISON CENTER or doctor if you feel unwell.

P330 Rinse mouth with water.

P332 IF SKIN IRRITATED: Wash with plenty of soap and water.

P337 IF EYES IRRITATED: Rinse with plenty of water. Call a POISON CENTER or doctor if you feel unwell.

P340 Immediately call a POISON CENTER or doctor if you feel unwell.

P342+P340 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P350 Do not touch, rub or scratch affected area.

P360 Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

**PROTECTION**

P201 Obtain special instructions before use

P202 Do not breathe dust/fume/gas/aerosol/vapors

P273 Do not release into the environment

P280 Wear protective gloves/protective clothing/protective footwear/protective eyewear/face protection

P303+P361+P531 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF ON SKIN: Rinse with plenty of water. Remove contaminated clothing and shoes.

P312 Call a POISON CENTER or doctor if you feel unwell.

P314 Call a POISON CENTER or doctor if you feel unwell.

P330 Rinse mouth with water.

P332 IF SKIN IRRITATED: Wash with plenty of soap and water.

P337 IF EYES IRRITATED: Rinse with plenty of water. Call a POISON CENTER or doctor if you feel unwell.

P340 Immediately call a POISON CENTER or doctor if you feel unwell.

P342+P340 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P350 Do not touch, rub or scratch affected area.

P360 Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

**SHIELD LIFE**

**STORAGE**

TEMPERATURE

MIX RATIO

**LIQUID TEMPERATURE IN CONTAINERS**

**100 MAXIMUM NUCLEATED**

**85 OPTIMUM NUCLEATED**

**70 MINIMUM NUCLEATED**

**50 F**

**100 C**

**95 35**

**90 32**

**85 29**

**80 27**

**75 24**

**70 21**

**65 18**

**60 15**

**55 13**

**50 10**

**45 7**

**40 4**

**35 2**

**30 -1**

Green: 1 Temp

Brown: above actual

Blue: below actual

## B

**IN CASE OF EMERGENCY CALL CHEMTRAC: 800-424-9300 INTERNATIONAL 1-703-527-3687**

PROBLY MANUFACTURED BY THE GUY

FOR PROFESSIONAL USE ONLY CONTENTS LOT #

GALEONS LBS/NET MFG DATE

PROBLY MANUFACTURED BY THE GUY

SPECIALTY PRODUCTS, INC. 2410 104TH ST. CT. S, STE D LAKEWOOD, WA 98499 800 627 0773 • SPECIALTY-PRODUCTS.COM © 2018 SPECIALTY PRODUCTS, INC. REV. 11-8-18

2. Run material agitator in the **B** component container if required (for product you are applying, refer to the Technical Data Sheet and product container label).

3. Check the screens in the fluid strainer/air trap.

3.1. Visually inspect **A** and **B** component strainer screens located in clear fluid strainer/air trap for cleanliness and clean or replace if required.



DAILY START-UP VIDEO

**4. Switch the LPG™ main power switch located on the panel, to the “ON” position.**

4.1. Uncoil LPG™ hose and plug in GFCI 20AMP Circuit Breaker into LPG™ hose power cord and plug into outlet if hose heat is required.

DO NOT BYPASS “GFCI 20AMP CIRCUIT BREAKER” FOR THE LPG™ HOSE BY PLUGGING LPG™ HOSE DIRECTLY INTO MAIN POWER SUPPLY!

Hose heat is designed to warm material prior to spray application. Continued operation of the hose heat during spray operations will degrade the integrity of the self-regulating hose heat element. Allow a minimum of 20 minutes for hose warm up time. Unplug after 30 minute warm up period.

4.2. Once the LPG™ low pressure air compressor begins to cycle on/off, purge the air from the fluid strainers air trap to within 1.5 inch from the top of the strainer cap.

Mark the fluid level visible through the translucent containers. Once product dispensing begins, monitor the starting fluid level lines and ensure fluid levels are dropping equally.

**5. Adjust the flow control dial clockwise to approximately 0 HZ.**

SPI recommends continuous use of LPG to be at a minimum 25HZ to prolong life span of the 1 HP electric motor. Intermittent use at lower speeds is acceptable at a 50% duty cycle, but may cause over current errors and premature motor failure.

Amount of output achieved is directly related to how warm the fluid material in the containers being dispensed. The warmer the product, the more output can be achieved. See Output Chart on page 43.

**6. Remove the static mixer and place the nose of the gun over a properly grounded waste container.**

6.1. Open the **A** and **B** component fluid manual valves on the LOCK N LOAD™ gun.

6.2. Holding the gun over the properly grounded waste container press the trigger long enough to ensure even flow of the **A** and **B** components.



6.3. Observe the **A** and **B** component inlet thermometers and ensure component temperatures are in accordance with the product container labels and tech data.

6.4. If even flow is not achieved, release the trigger, and close the manual valves. Clean out the **A** and **B** fluid ports using supplied clean out drill, and return to step 6.2.

**7. Close the **A** and **B** component fluid manual valves, and clean the nose of the LOCK N LOAD™ gun.**

**8. Proceed to spray instructions on page 27.**

**1. Install the appropriate static mixer in the LOCK N LOAD™ gun, close latch assembly, and install corresponding safety shroud over static mixer.**



See product Technical Data Sheet or material container label.

**2. Apply nucleation air and adjust flow valve to fully open [clockwise].**

**3. Adjust flow control dial clockwise or counterclockwise to approximately 0 HZ.**

**4. Open the **A** and **B** component fluid manual valves.**



Under certain conditions a small amount of **A** or **B** component material may weep from the nose of the gun once the manual valves are opened. Only open the manual valve when actively spraying.

**5. Press the gun trigger and test spray off target.**

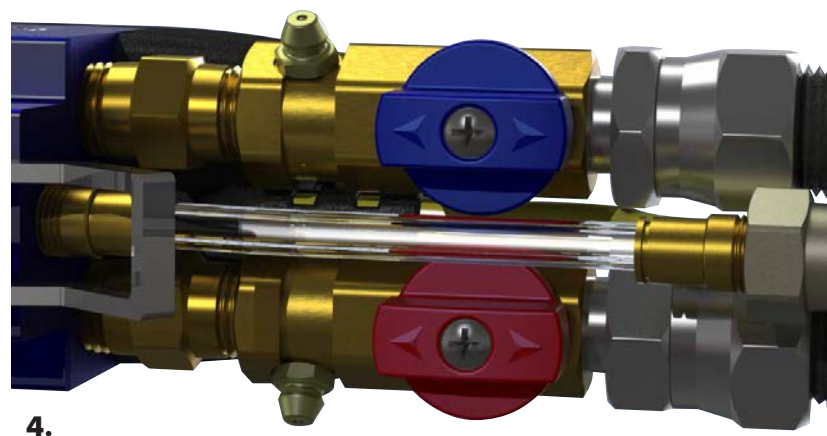
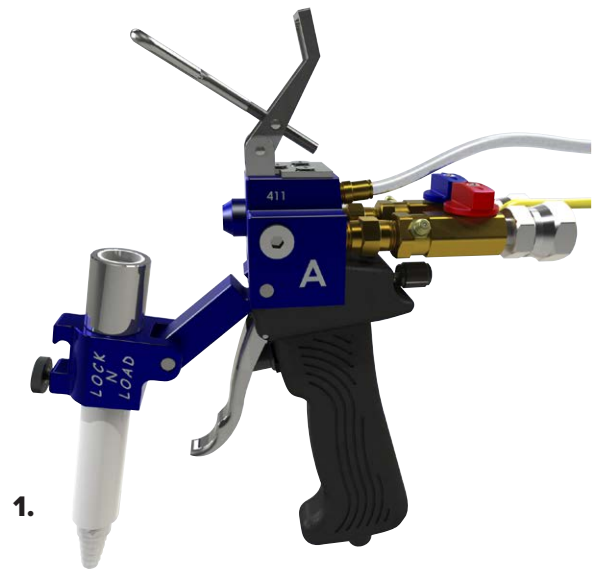
- 5.1. Adjust the flow control dial to increase or decrease the output and adjust the air nucleation valve to obtain the desired spray pattern.
- 5.2. Monitor the pressure gauges and ensure the differential pressure between the **A** and **B** component gauge is no greater than 250 PSI.
- 5.3. Begin spray operations.



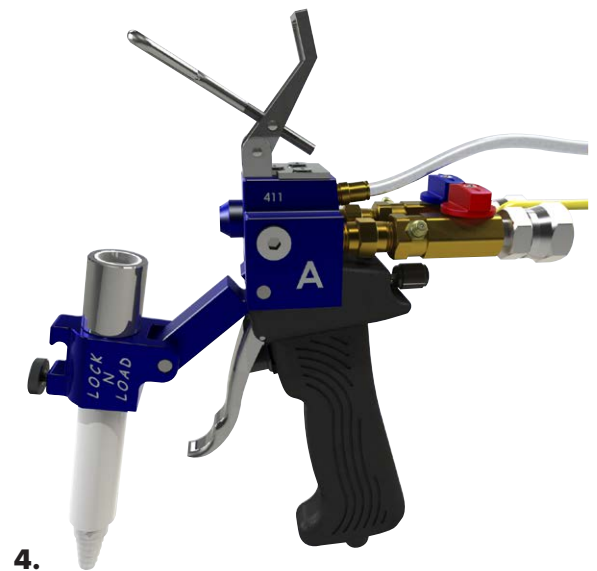
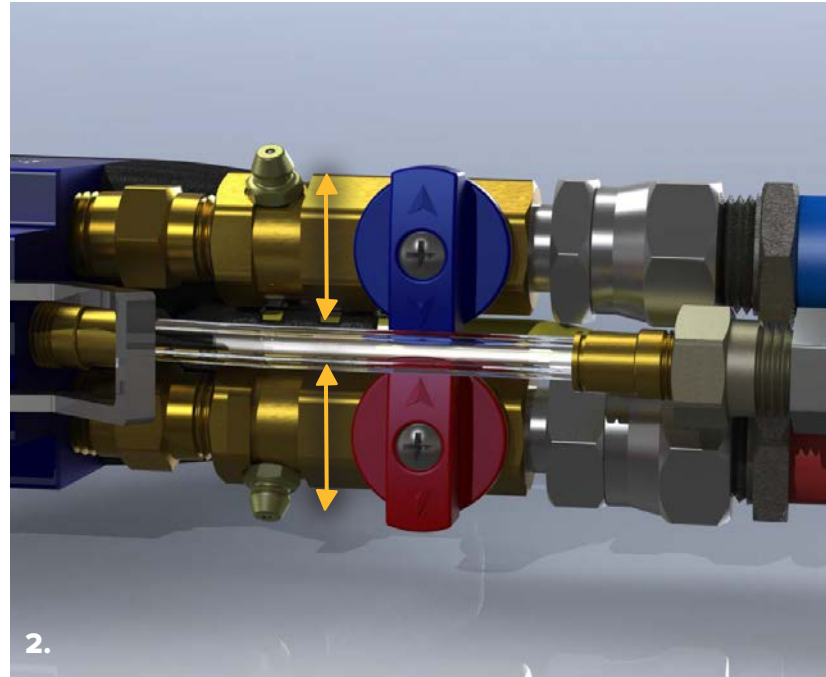
Mark the fluid level visible through the translucent containers. Once product dispensing begins, monitor the starting fluid level lines and ensure fluid levels are dropping equally.



SPRAY  
VIDEO



1. Release the gun dispensing trigger.
2. Close the **A** and **B** fluid component manual valves located on the gun fluid block.
3. Turn the main power switch to the off position.
4. Unlatch mixer retainer shroud and pivot away from fluid block.
  - 4.1. Turn off air to fluid block.
  - 4.2. Grease spray gun to purge material from fluid port. This requires 2 to 3 pumps in **A** and **B** grease zerk.
  - 4.3. Remove the used static mixer and install a new static mixer.
5. Disconnect the power to the GFCI 20AMP Circuit Breaker for LPG™ Hose if hose heat was utilized during spray operations.
6. Coil the spray hose for storage. While preparing for storage or during operation **DO NOT** kink spray hose or coil tighter than a three foot diameter.



DAILY SHUT DOWN  
VIDEO

# PRESSURE RELIEF PROCEDURE



1. Perform daily shutdown procedure.
2. Open low pressure compressor relief valve by rotating the handle counterclockwise.
3. Monitor airflow exiting relief valve and close valve once airflow stops.
4. Lower level by opening pinch clamp after relieving pressure from the LPG. Close valves on strainers assembly's once fluid level is below the sight glass.



PRESSURE RELIEF PROCEDURE  
VIDEO



When LPG™ is not expected to be used for an extended period of time (longer than 2 weeks), it is advised that the equipment be flushed in preparation for storage.



Plural component industry standards that include the handling of moisture sensitive isocyanates, advise you to perform the equipment start-up and shut down procedures every two weeks to allow fresh material to flow through the system. During the start-up procedure, dispense approx. 1 gallon of product (or more depending on your length of spray hose.)

1. Fill two new 5 gallon LPG™ Synergy Series containers with a minimum 3 gallons of DPM cleaning solvent each.
2. Connect a 5 gallon container to **B** component transfer hose assembly, and the other 5 gallon container to the **A** component transfer hose assembly.

3. Pressurize each container with air as detailed in your daily start-up procedure step 4.
4. Remove and **DO NOT** insert a static mixer into the LOCK N LOAD™ Gun.
5. Over a properly grounded waste container, dispense a minimum of 3 gallons of DPM per component side.
6. Monitor the fluid level in the containers. Once 3 gallons of DPM has flushed each component side, turn the machine to the off position.
7. Repeat steps 1-6 using DOP.
8. Follow the daily shut-down procedure.
9. Arrange LPG™ equipment package for storage.



FLUSH PROCEDURE  
VIDEO

# PROPORTIONING PUMP REPLACEMENT

1. Identify proportioner pump to be replaced and ensure the replacement pump is checked.
2. Perform equipment daily shutdown and pressure relief procedure.
3. Remove and cap fluid pressure line fitting at pressure tree tee fitting.



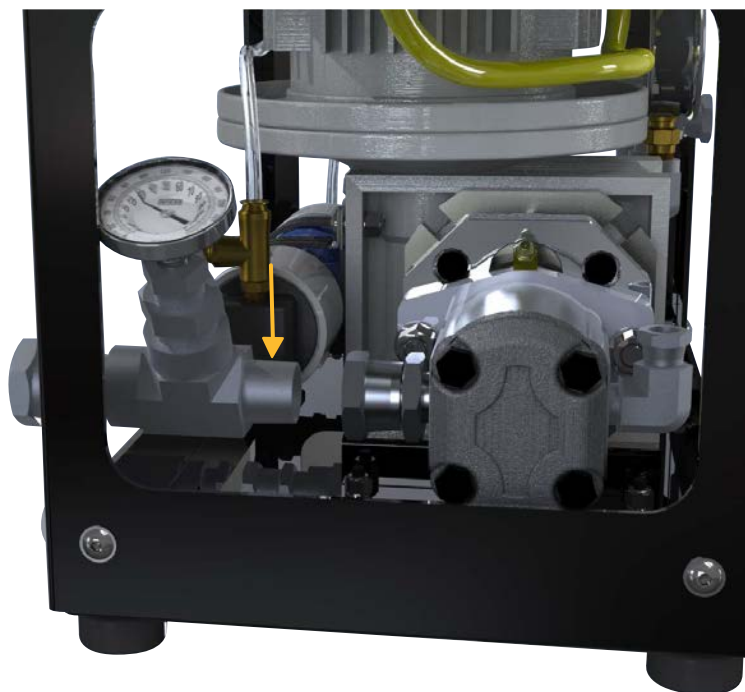
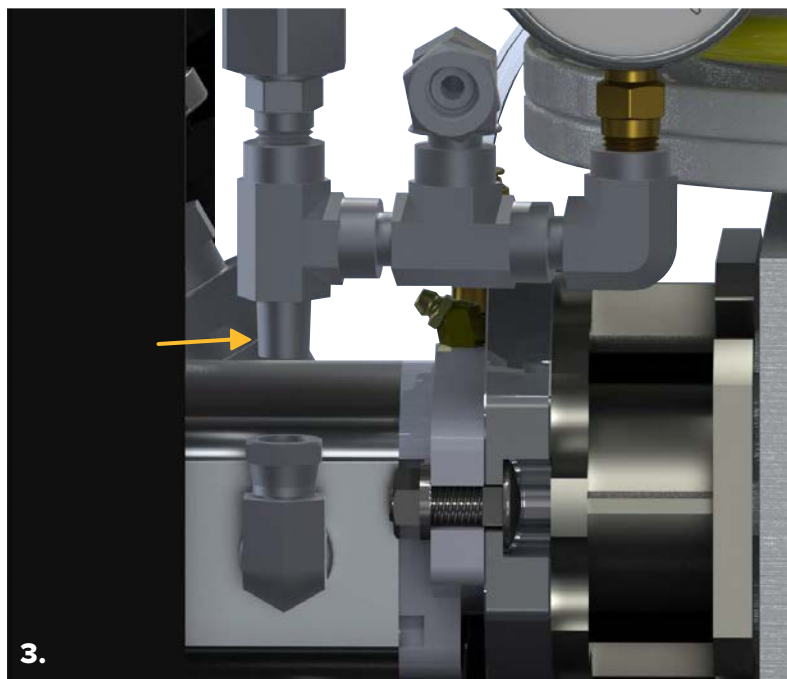
Pressure hose can remain connected to pressure tree during pump replacement.

## 4. Remove and cap component transfer hose tee fitting.

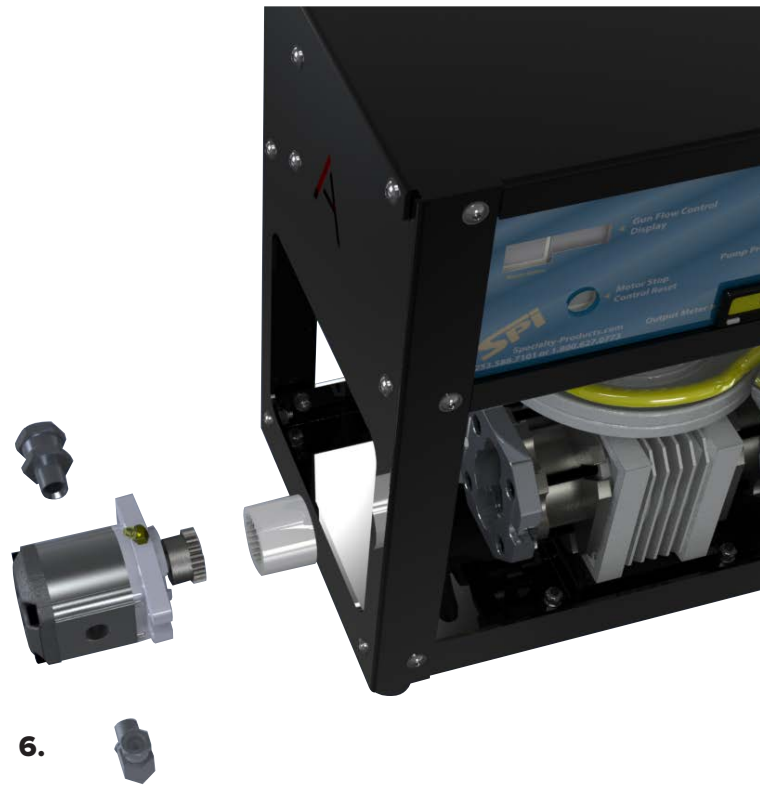
- 4.1. Remove Supply Temperature Tree from Proportioner Pump as pictured

## 5. Loosen and remove both bolts from proportioner pump mounting flange.

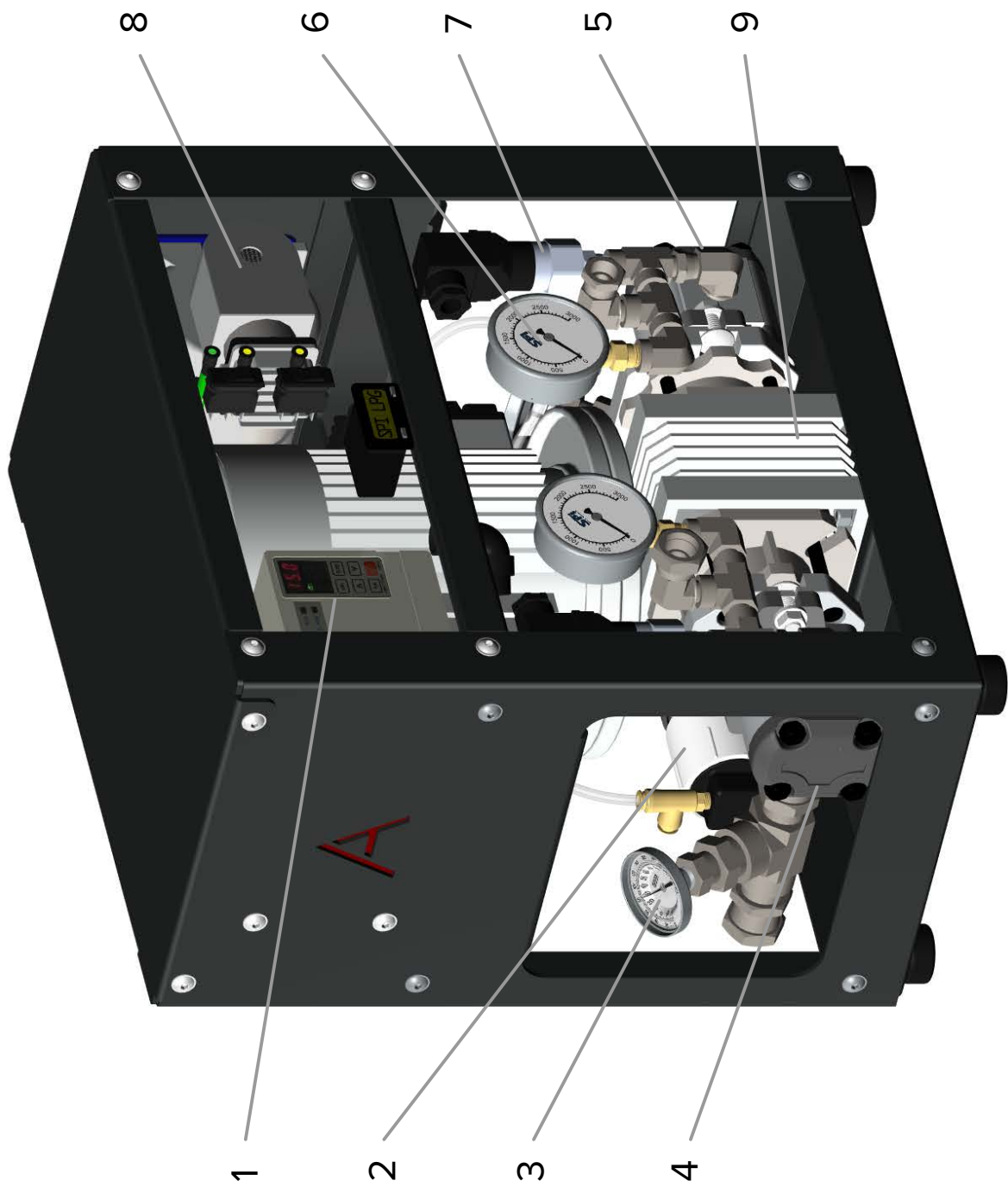
## 6. Carefully slide proportioning pump horizontally away from the gearbox assembly.



7. Carefully align new proportioner pump shaft with the gearbox assembly and slide into position.
8. Install bolts and tighten.
9. Remove cap from fluid pressure line and reinstall pressure line to proportioner pump swivel fitting.
10. Remove cap from component transfer hose and reinstall transfer hose to proportioner pump swivel fitting.
11. Perform steps 6 through 15 of the initial set-up procedure.



# L-201001: 110 VOLT LPG™ PROPORTIONER



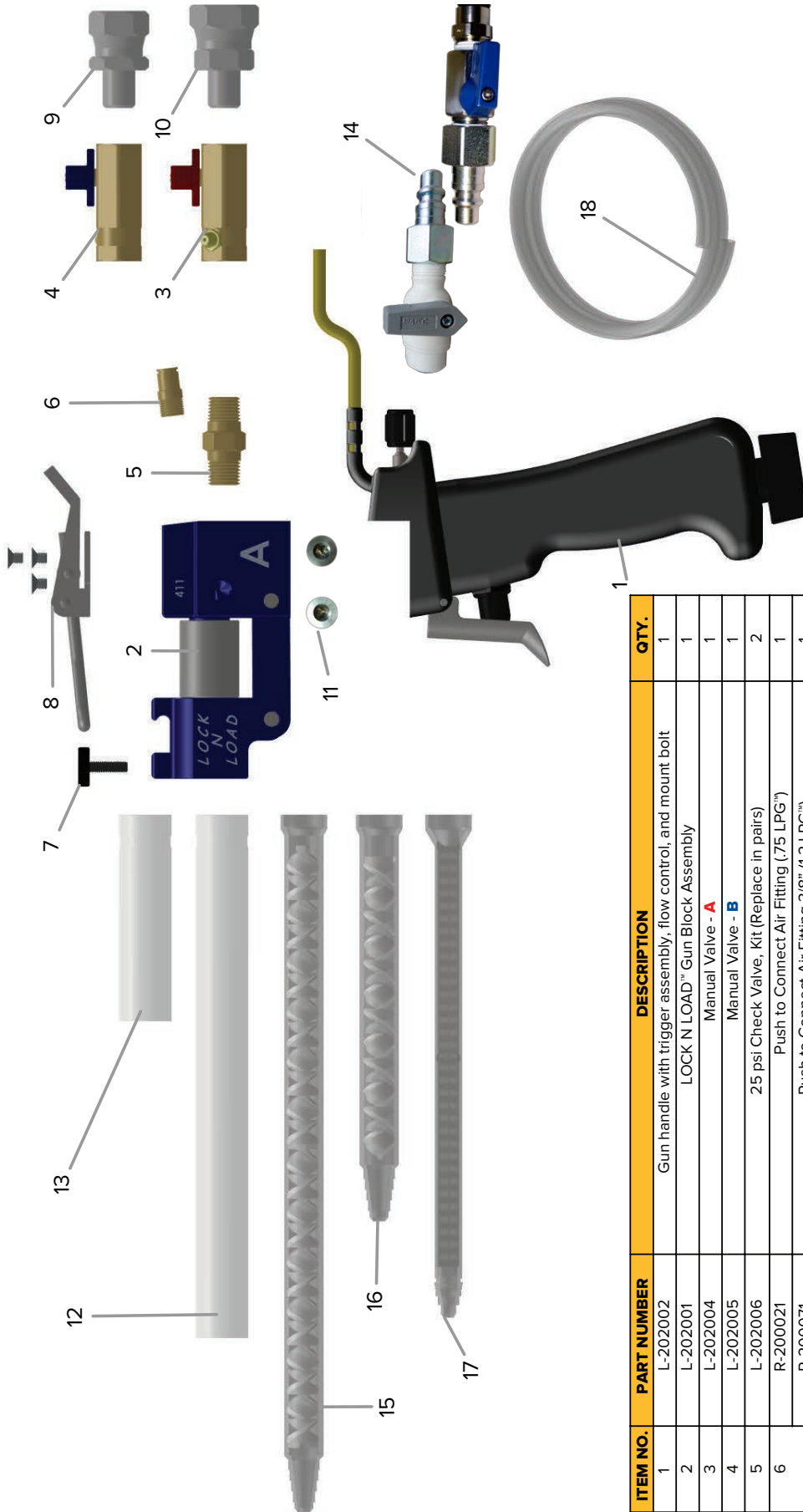
# L-201001: 110 VOLT LPG™ PROPORTIONER



REFERENCE	PART #	DESCRIPTION	QUANTITY
1	R-300022	Motor Controller, VS Mini	1
	R-300050	Hitachi - AC Drive, SN 1397 & up	1
2	L-201202	Silica Gel Dryer Assembly	1
	R-500001	Replacement Silica Crystal Kit* for Air Dryer	2
3	R-200037	Material Supply Thermometer	1
4	L-201102	Replacement <b>A</b> Side Pump (0.75 LPG™)	1
	L-201105	Replacement <b>A</b> Side Pump (1.2 LPG™)	1
5	L-201104	Replacement <b>B</b> Side Pump (0.75 LPG™)	1
	L-201106	Replacement <b>B</b> Side Pump (1.2 LPG™)	1
6	R-200038	Pressure Gauge	2
7	R-200039	High Pressure Safety Switch	2
8	L-201103	Replacement Air Compressor-SN#1356 & previous	1
	L-201107	TC-20 Air Compressor SN#1357 & up	1
9	L-201100	Motor/Pump Drive Kit	1
10	R-300004	Material Supply Pressure Switch	1

\* Kit contains enough Silica for 3 replacement cycles.

# L-202016: LOCK N LOAD™ GUN



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	L-202002	Gun handle with trigger assembly, flow control, and mount bolt	1
2	L-202001	LOCK N LOAD™ Gun Block Assembly	1
3	L-202004	Manual Valve - <b>A</b>	1
4	L-202005	Manual Valve - <b>B</b>	1
5	L-202006	25 psi Check Valve, Kit (Replace in pairs)	2
6	R-200021	Push to Connect Air Fitting (.75 LPG <sup>™</sup> )	1
7	R-100071	Push to Connect Air Fitting 3/8" (1.2 LPG <sup>™</sup> )	1
8	R-100083	Safety Shroud Thumb Screw	1
9	L-202007	LOCK N LOAD™ lever latch replacement, Kit	1
10	P-100548	<b>B</b> Component Swivel Fitting	1
11	P-100549	<b>A</b> Component Swivel Fitting	1
12	R-200051	B100 - Side Cleanout Plug (BSPP)	2
13	L-202009	12 in Safety Shroud	1
14	L-202010	7 in Safety Shroud	1
15	L-202014	Air Nucleation Flow Control Assembly (.75 LPG <sup>™</sup> )	1
16	L-202015	Air Nucleation Flow Control Assembly 3/8" (1.2 LPG <sup>™</sup> )	1
17	L-202018	Stainless Steel - 3/8" Air Flow Control Assembly (1.2 LPG <sup>™</sup> )	1
18	P-100291(12/100)	12" Round Static Mixer (Available in 12 and 100 packs)	1
	P-100320(12/100)	7" Round Static Mixer (Available in 12 and 100 packs)	1
	P-100299(12/100)	9" Square Static Mixer (Available in 12 and 100 packs)	1
	L-202008	(.75 LPG <sup>™</sup> )33" Air Nucleating Replacement Set (Package of 12 lines)	1
	L-202013	(1.2 LPG <sup>™</sup> ) 3/8, 33" Air Nucleating Replacement Set (Package of 6 lines)	1

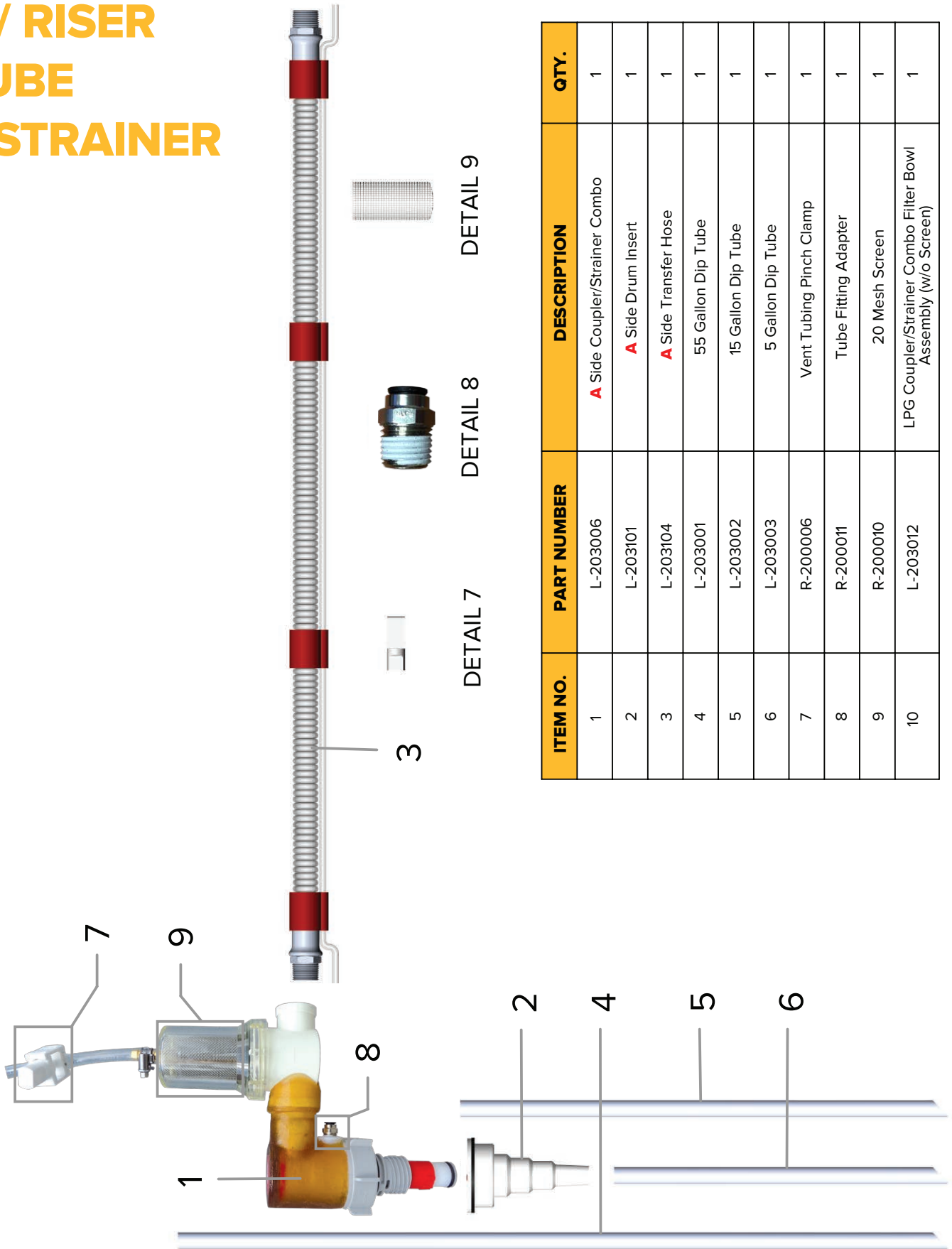
# L-207000: JOINT FILL KIT



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	P-100299-(12/100)	9" Static Mixers (Available in 12 and 100 Packs)	1
2	R-200032	(.75 LPG™) Nucleation Port Plugs (10 Pack)	1
	R-200074	(1.2 LPG™) Nucleation Port Plugs (10 Pack)	1

# L-203100: A SIDE LPG™ TRANSFER ASSEMBLY

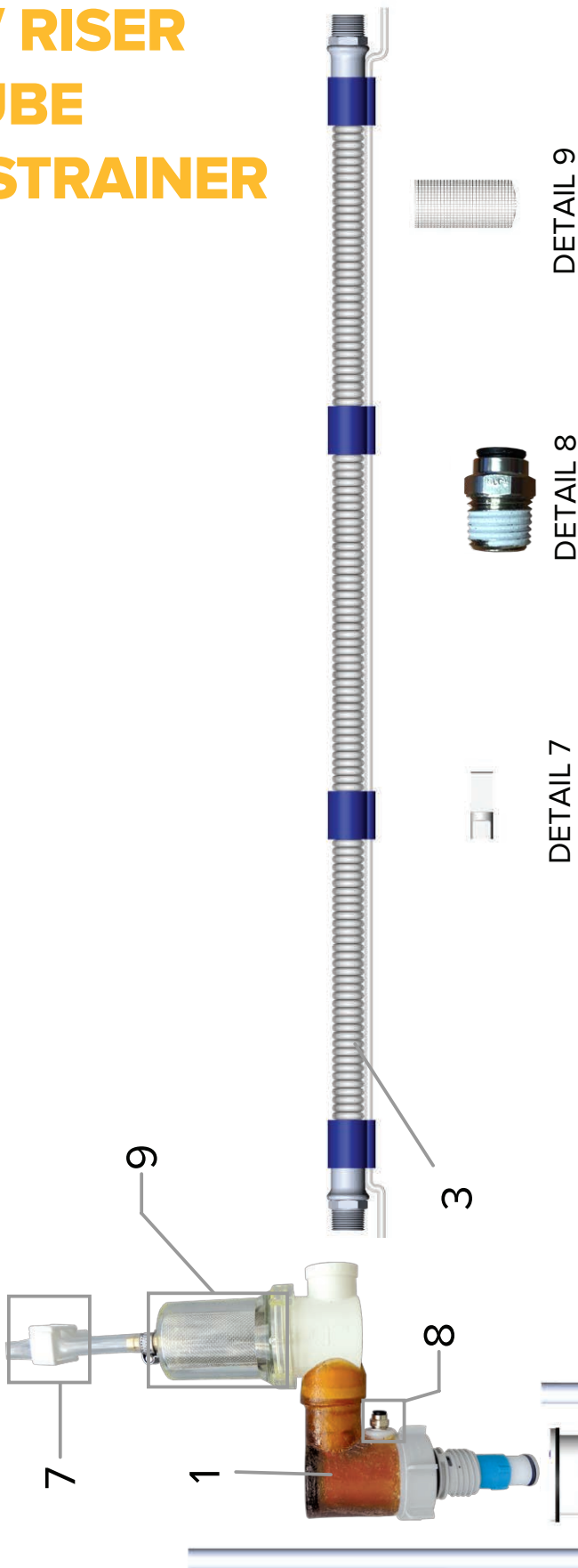
## W/ RISER TUBE & STRAINER



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	L-203006	A Side Coupler/Strainer Combo	1
2	L-203101	A Side Drum Insert	1
3	L-203104	A Side Transfer Hose	1
4	L-203001	55 Gallon Dip Tube	1
5	L-203002	15 Gallon Dip Tube	1
6	L-203003	5 Gallon Dip Tube	1
7	R-200006	Vent Tubing Pinch Clamp	1
8	R-200011	Tube Fitting Adapter	1
9	R-200010	20 Mesh Screen	1
10	L-203012	LPG Coupler/Strainer Combo Filter Bowl Assembly (w/o Screen)	1



## W/ RISER TUBE & STRAINER



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	L-203007	<b>B</b> Side Coupler/Strainer Combo	1
2	L-203201	<b>B</b> Side Drum Insert	1
3	L-203204	<b>B</b> Side Transfer Hose	1
4	L-203001	55 Gallon Dip Tube	1
5	L-203002	15 Gallon Dip Tube	1
6	L-203003	5 Gallon Dip Tube	1
7	R-200006	Vent Tubing Pinch Clamp	1
8	R-200011	Tube Fitting Adapter	1
9	R-200010	20 Mesh Screen	1
10	L-203012	LPG Coupler/Strainer Combo Filter Bowl Assembly (w/o Screen)	1

PROBLEM	CAUSE	SOLUTION	
<b>LPG™ will not turn on - Motor does not operate</b>	No Power	Plug in power cord	
		Turn main power switch on	
		Check circuit breaker at main	
	Motor controller error	<b>EF2</b> Overpressure Condition	Relieve overpressure condition and reset motor controller*
		<b>OL1</b> Motor Overload	Ensure LPG™ output is greater than 25 HZ for 100% duty cycle operation Check for seized <b>A</b> or <b>B</b> component pump. (pump should turn by hand with some resistance)
		<b>LV or LVI</b> Main Circuit Low Voltage	Check incoming voltage supply**
	Loose connections	Check connections for remote trigger assembly on hose and at connection point on LPG™	
Flow control knob adjusted fully counter clockwise	Adjust the flow control knob clockwise to optimum flow setting		
<b>Low or no proportioner output</b>	Material temperature below required application minimum	Raise material temperature to within required application values per container labels	
	Inadequate seal around component container causing air leak	Tighten/clean container fitting to provide adequate seal	
	Obstructed fluid hose or gun	Open or clear obstruction	
		Replace obstructed hose if necessary	
	Restricted or partially obstructed material transfer line/material strainer	Remove restriction in transfer line or clean strainer	
	Worn or damaged proportioner pump.	Replace applicable proportioner pump	
Pumps vapor locked	Elevate back side of machine 3.5 inches by placing 2X4 on edge under back side of machine		
<b>Fluid leaking around proportioner shaft seal</b>	Worn shaft seal	Replace proportioner pump	
<b>Gun</b>	Material leaking out grease zerk	Give 1/2 pump of grease	
<b>LPG™ Hose GFCI 20AMP Circuit Breaker keeps tripping</b>	If you are connecting multiple sets of LPG™ Hose together, disconnect the LPG™ Hose Heat Circuit's power cord connections between each LPG™ Hose section and test the sections individually to determine which section of LPG™ Hose is tripping the GFCI 20AMP Circuit Breaker. The continuous "tripping" will determine which section of LPG™ Hose has an interruption within the Heat Circuit. DO NOT PLUG LPG™ HOSE DIRECTLY INTO MAIN POWER BY ITSELF!	Replace external hose LPG™ line set	

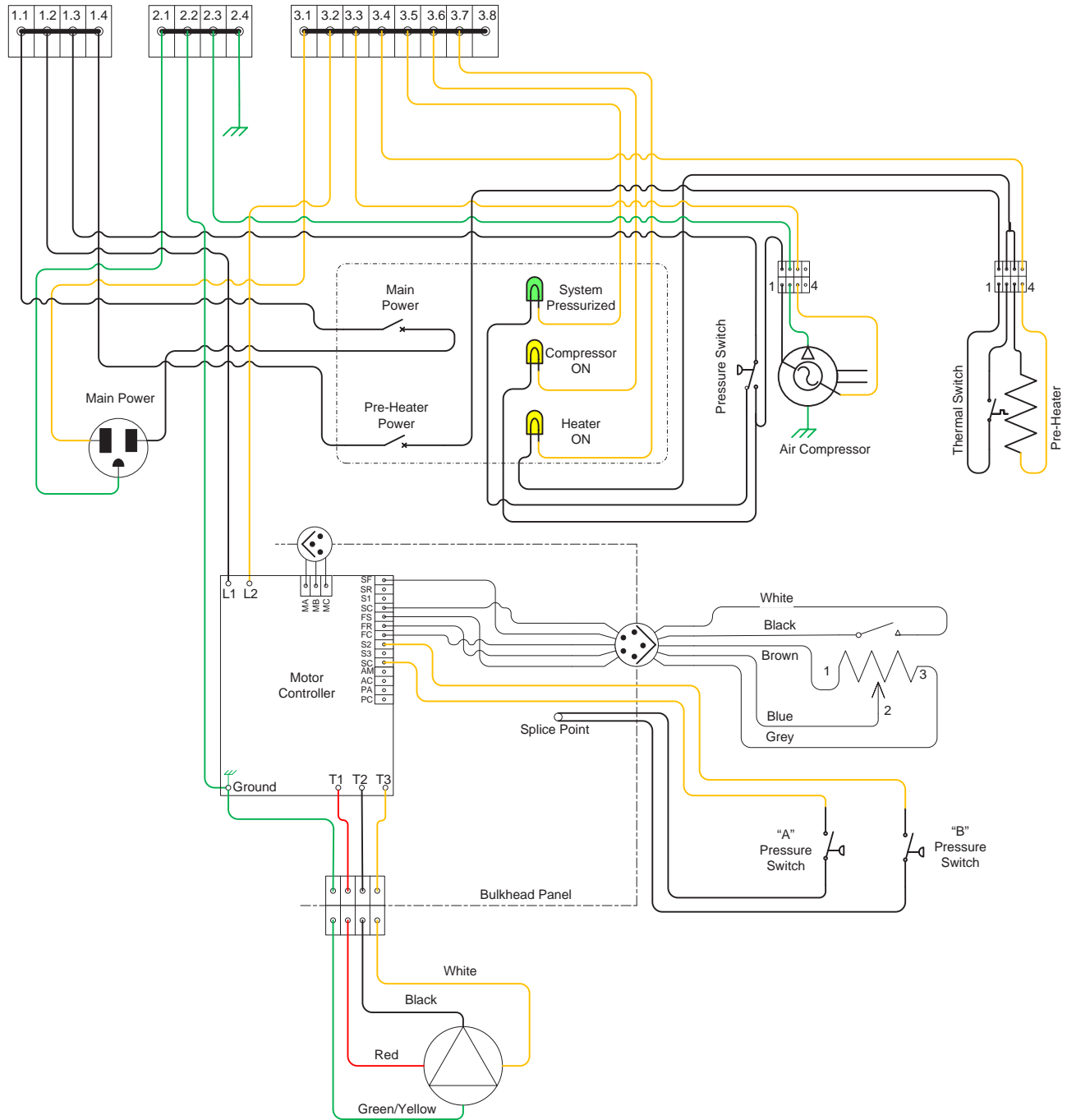
\* An over pressure condition requires that power be removed from the LPG™ in order to reset the fault. Disconnect power and wait for the display on the motor controller to turn off to clear the fault code.

\*\* If LPG™ shuts off during starting operations then check and make sure 110 Receptacle is not a GFCI.

# 110 VOLT WIRING DIAGRAM



## VS MINI



## INSTALLED IN LPG™ SN #1397 & UP

### ERROR CODES

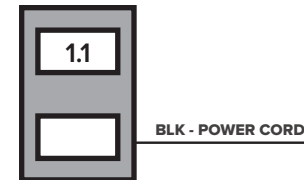
ERROR CODE	NAME	CAUSE(S)
E01	Overcurrent event while at constant speed	The inverter output was short-circuited, or the motor shaft is locked or has a heavy load. These conditions cause excessive current for the inverter, so the inverter output is turned OFF.
E02	Overcurrent event during deceleration	
E03	Overcurrent event during acceleration	
E04	Overcurrent event during other conditions	
E05	Overload protection	
E07	Over-voltage protection	When the DC bus voltage exceeds a threshold, due to regenerative energy from the motor.
E10	Current detection error	If an error occurs in the internal current detection system, the inverter will shut off its output and display the error code.
E12	Over Pressure Trip	External Trip / limit exceeded the 1000 PSI break point. Restart machine and decrease motor speed / Hertz level.
E15	Input over-voltage	The inverter tests for input over-voltage after the inverter has been in STOP MODE for 100 seconds. If an over-voltage condition exists, the inverter enters a fault state. After the fault is cleared, the inverter can enter Run Mode again.
E21	Inverter thermal trip	When the inverter internal temperature is above the threshold, the thermal sensor in the inverter module detects the excessive temperature of the power devices and trips, turning the inverter output OFF.
E37	Emergency stop	Emergency stop signal is given.
E38	Low speed overload protection	If overload occurs during the motor operation at a very low speed, the inverter will detect the overload and shut off the inverter output.
5555 ROTATING	Reset	RS input is ON or STOP/RESET key is pressed.
----	Undervoltage	If input voltage is under the allowed level, inverter shuts off output and wait with this indication.
8888	Waiting to restart	This indication is displayed after tripping before restarting.

### LPG™ WIRING GUIDE

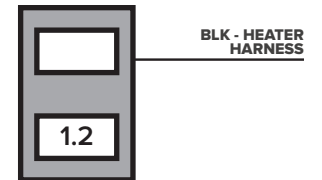
#### TERMINAL BLOCK

(OPEN TERMINAL)	3.4	3.8	22G WHT - LIGHTS
WHT - COMPRESSOR HARNESS	3.3	3.7	22G WHT - LIGHTS
WHT - HEATER HARNESS	3.2	3.6	22G WHT - LIGHTS
WHT - POWER CORD	3.1	3.5	WHT - POWER WIRE TO HITACHI "N" TERMINAL
GREEN - GROUND WIRE TO HITACHI	2.2	2.4	GREEN - MOTOR GROUND
GREEN - POWER CORD	2.1	2.3	GREEN - COMPRESSOR HARNESS
BLK - BTM TERMINAL ON HEATER POWER SWITCH	1.2	1.4	BLK - POWER WIRE TO HITACHI "L1" TERMINAL
BLK - TOP TERMINAL ON MAIN POWER SWITCH	1.1	1.3	BLK - TOP CONNECTOR ON PNEUMATIC PRESSURE SWITCH

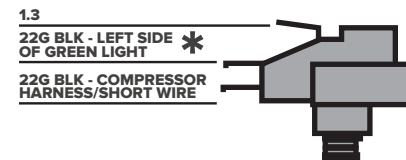
#### MAIN POWER SWITCH



#### HEATER POWER SWITCH



#### PNEUMATIC SWITCH



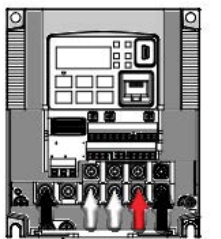
#### SYSTEM PRESSURED GREEN LIGHT



#### COMPRESSOR ON YELLOW LIGHT

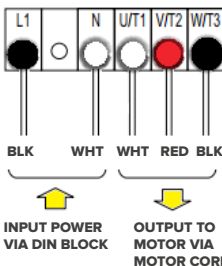


#### HEATER ON YELLOW LIGHT

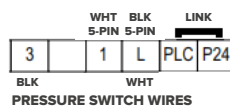


CHASSIS GROUND (M4)

#### SUPPLIED POWER



#### LOGIC INPUTS



#### ANALOG INPUTS

# DIMENSIONS



DIMENSION	IN.(mm)
A	18 (457)
B	17.5 (445)
C	10.5 (267)

CATEGORY	DATA
<b>Maximum Fluid Working Pressure</b>	1000 PSI
<b>Maximum Fluid Temperature</b>	110° F 43° C
<b>Maximum Output</b>	.75 GPM for .75 LPG™ Machines 1.2 GPM for 1.2 LPG™ Machines (dependent on material temperature)
<b>Nucleating Air Requirements</b>	20 CFM at 100 PSI for maximum output- reference chart on page 43.
<b>Line Voltage Requirement</b>	110-125 Vac, 50/60 Hz*
<b>Amperage Requirement</b>	15 Full Load Peak Amps
<b>Fluid Inlets</b>	3/4" NPT
<b>Fluid Outlets</b>	"A" 1/2" NPT "B" 3/8" NPT
<b>Weight</b>	76 lb. (34.5 kg)
<b>Wetted Parts</b>	Aluminum, stainless steel, carbon steel, brass, carbide, chrome, chemically resistant o-rings, PTFE, ultra-high molecular weight polyethylene

\* The LPG™ has internal over current protection and **should not be operated on a GFCI circuit.**

\*\* Minimum Operating Fluid Temperature 70F, Optimum Temperature 80-85. Refer to Tech Data Sheets for each individual product in use

# AIR REQUIREMENT CHART FOR LPG™

\* Air required when spraying/air nucleating Synergy Series products.



## LPG'S WITH 1.2 GPM OUTPUT CAPACITY

SYNERGY SERIES PRODUCT - FOAM	SETTING ON GUN CONTROL FLOW DISPLAY	MIN LIQUID TEMP IN DRUM	LPG™ INLET THERMOMETER	HOSE THERMOMETER
20 CFM AT 100 PSI	60 HZ	80	80	75
20 CFM AT 100 PSI	50 HZ	70	70	70
15 CFM AT 100 PSI	30 HZ	70	70	70
9 CFM AT 100 PSI	25 HZ	70	70	70

**NO LOWER SETTINGS RECOMMENDED**

SYNERGY SERIES PRODUCT - POLYUREA (WHEN SPRAY APPLIED)	SETTING ON GUN CONTROL FLOW DISPLAY	MIN LIQUID TEMP IN DRUM	LPG™ INLET THERMOMETER	HOSE THERMOMETER
20 CFM AT 100 PSI	UP TO 25 HZ	110	110	95
20 CFM AT 100 PSI	20 HZ	90	90	80
15 CFM AT 100 PSI	15 HZ	90	90	80

**NO LOWER SETTINGS RECOMMENDED**

## LPG'S WITH .75 GPM OUTPUT CAPACITY (GEN 1)

SYNERGY SERIES PRODUCT - FOAM	SETTING ON GUN CONTROL FLOW DISPLAY	MIN LIQUID TEMP IN DRUM	LPG™ INLET THERMOMETER	HOSE THERMOMETER
9 CFM AT 100 PSI	60 HZ	80	80	75
9 CFM AT 100 PSI	50 HZ & LOWER	70	70	70
SYNERGY SERIES PRODUCT - POLYUREA (WHEN SPRAY APPLIED)	SETTING ON GUN CONTROL FLOW DISPLAY	MIN LIQUID TEMP IN DRUM	LPG™ INLET THERMOMETER	HOSE THERMOMETER
9 CFM AT 100 PSI	60 HZ	90	90	90
9 CFM AT 100 PSI	55-60 HZ	85	85	85
9 CFM AT 100 PSI	45 HZ & LOWER	70	70	70

\* Above values are theoretical. Field variables will produce variable requirements.

\*\* Field conditions and variables can cause variations in above requirements.

# LIMITED LIFETIME WARRANTY

## FOR SPI LOW PRESSURE SYNERGY SERIES LPG™ GEAR PUMP PROPORTIONER

Specialty Products, Inc. warrants the following non-consumable components of SPI's Synergy Series LPG™ Gear Pump Proportioner: A and B proportioning pumps, electric motor with gear reducer, onboard air compressor, product usage counter, pressure gauges, pressure relief valves and sensors, and frame to be free from defects in material and workmanship on the date of sale by SPI, or its authorized distributor or agent, to the original purchaser for the lifetime of the original purchaser.

This limited lifetime warranty applies only when all of the following conditions are met:

(1) The equipment is supplied by SPI and operated and maintained in accordance with SPI's instructions. (Equipment parts damaged by faulty installation, abuse, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or the presence of gummed up material or material that cannot be pumped will not be covered by this Limited Lifetime Warranty.);

(2) Only Synergy Series Chemistries polymer components designed, manufactured, or sold by SPI, can be used in the LPG. Use of any other product in the LPG will void this expressed Limited Lifetime Warranty as well as any warranties implied by law and will terminate technical support from SPI;

(3) The original purchaser must purchase a minimum of \$5,000.00 of Synergy Series Chemistries plural component polymer products, designed by SPI, from SPI, each calendar quarter (\$20,000.00 annually) to maintain this lifetime warranty. If original purchaser fails to purchase the required amount of such products within a calendar quarter, he or she shall have 30 additional days to do so. Product purchases in excess of \$5,000.00 in a quarter shall be applied to the next quarter;

(4) The original purchaser's account with SPI must be current. The sole exclusive remedy of the original purchaser, which is to have SPI repair or replace a defective non-consumable component at no cost, is conditioned upon the pre-paid return of the component claimed to be defective to SPI for verification of the claimed defect. If the claimed defect is verified, SPI will repair or replace free of charge any defective parts. The equipment which is designed and manufactured by SPI will be returned to the original purchaser, pre-paid, via the same shipping method used to ship part(s) to SPI. If inspection of the equipment does not disclose any defect in material or workmanship, a repair or replacement will be made at SPI's then existing rates for necessary parts, labor, and transportation.

In no event will SPI be liable for indirect, incidental, special or consequential damages resulting from SPI's supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of SPI, or otherwise.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.



**TO PLACE AN ORDER,  
CONTACT SPI AT:  
1 800 627 0773 Toll Free  
253 588 7101  
253 588 7196 Fax  
info@specialty-products.com**



**CONTACT  
US**

All written and visual data contained in this document reflects the latest product information available at the time of publication. Specialty Products Inc. reserves the right to make changes at any time without notice.

\*An independent air compressor may be required depending on your application. Please consult your SPI Sales Representative for more information.

**SPECIALTY PRODUCTS INC.  
2410 104<sup>th</sup> St. C. S. Suite D  
Lakewood, WA 98499**