

# Internal Chop System

GC-1412D

## ***Low Emission Internal-Mix Gel-Coat For use with Polyester Resin, and Gel-Coat***

Maximum fluid working pressure by  
Fluid Section Assembly:  
20864-05 - 1300 psi. (9 MPa, 90 bar)  
21780-01 - 1700 psi. (12 MPa, 117 bar)  
22026-01 - 2000 psi. (14 MPa, 138 bar)

Maximum air pressure:  
100 psi. (0.7 MPa, 7 bar)



### **Important Safety Instructions**

Read all warnings and instructions in  
this manual. Save these instructions.

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N/A = Non Applicable

# Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbol refers to procedure-specific risk. Refer back to these warnings. Additional, product-specific warnings may be found throughout the body of this manual where applicable.

- See Important Safety Information - MEKP, Polyester Resins and Gel-Coats and Spraying and Lamination Operations section of this manual.

 <b>WARNING</b>	
	<p><b>FIRE AND EXPLOSION HAZARD</b></p> <p>Flammable fumes, such as solvent and paint fumes, in <b>work area</b> can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> <li>• Use equipment only in well ventilated area.</li> <li>• Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).</li> <li>• Keep work area free of debris, including solvent, rags and gasoline.</li> <li>• Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.</li> <li>• Ground all equipment in the work area. See <b>Grounding</b> instructions.</li> <li>• Use only grounded hoses.</li> <li>• Hold gun firmly to side of grounded pail when triggering into pail.</li> <li>• If there is static sparking or you feel a shock, <b>stop operation immediately</b>. Do not use equipment until you identify and correct the problem.</li> <li>• Keep a working fire extinguisher in the work area.</li> <li>• See additional information on MEKP in the MEKP Section of this manual.</li> </ul>
	<p><b>PERSONAL PROTECTIVE EQUIPMENT</b></p> <p>You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to:</p> <ul style="list-style-type: none"> <li>• Protective eyewear</li> <li>• Clothing and respirator as recommended by the fluid and solvent manufacturer</li> <li>• Gloves</li> <li>• Hearing protection</li> </ul>
	<p><b>TOXIC FLUID OR FUMES HAZARD</b></p> <p>Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.</p> <ul style="list-style-type: none"> <li>• Read MSDS's to know the specific hazards of the fluids you are using.</li> <li>• Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.</li> <li>• Always wear impervious gloves when spraying or cleaning equipment.</li> </ul>

# Warnings

 <b>WARNING</b>	
	<p><b>SKIN INJECTION HAZARD</b> 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. <b>Get immediate surgical treatment.</b></p> <ul style="list-style-type: none"> <li>• Do not point gun at anyone or at any part of the body.</li> <li>• Do not put your hand over the dispense outlet.</li> <li>• Do not stop or deflect leaks with your hand, body, glove, or rag.</li> <li>• Engage trigger lock when not spraying.</li> <li>• Follow <b>Pressure Relief Procedure</b> in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.</li> </ul>
	<p><b>MOVING PARTS HAZARD</b> Moving parts can pinch or amputate fingers and other body parts.</p> <ul style="list-style-type: none"> <li>• Keep clear of moving parts.</li> <li>• Do not operate equipment with protective guards or covers removed.</li> <li>• Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the <b>Pressure Relief Procedure</b> in this manual. Disconnect power or air supply.</li> </ul>
	<p><b>EQUIPMENT MISUSE HAZARD</b> Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> <li>• Do not operate the unit when fatigued or under the influence of drugs or alcohol.</li> <li>• Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See <b>Technical Data</b> in all equipment manuals.</li> <li>• Use fluids and solvents that are compatible with equipment wetted parts. See <b>Technical Data</b> in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer.</li> <li>• Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.</li> <li>• Do not alter or modify equipment.</li> <li>• Use equipment only for its intended purpose. Call your distributor for information.</li> <li>• Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.</li> <li>• Do not kink or over bend hoses or use hoses to pull equipment.</li> <li>• Keep children and animals away from work area.</li> <li>• Comply with all applicable safety regulations.</li> </ul>
	<p><b>PRESSURIZED ALUMINUM PARTS HAZARD</b> Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminum equipment. Such use can cause serious chemical reaction and equipment rupture, and result in death, serious injury, and property damage.</p>

# Important Safety Information

## Methyl Ethyl Ketone Peroxide (MEKP)

MEKP is among the more hazardous materials found in commercial channels. Proper handling of the “unstable (reactive)” chemicals presents a definite challenge to the plastics industry. The highly reactive property which makes MEKP valuable to the plastics industry in producing the curing reaction of polyester resins and gel-coats also produces the hazards which require great care and caution in its storage, transportation, handling, processing and disposal.

Workers must be thoroughly informed of the hazards that may result from improper handling of MEKP, especially in regards to contamination and heat. They must be thoroughly instructed regarding the proper action to be taken in the storage, use and disposal of MEKP and other hazardous materials used in the laminating operation.



**MEKP is flammable and potentially explosive, as well as potentially damaging to the eyes and skin.**

**Read material manufacturer’s warnings and material MSDS to know specific hazards and precautions related to MEKP.**

Contaminated MEKP can become explosive. Prevent contamination of MEKP with other materials, which includes, but is not limited to polyester overspray, polymerization accelerators and promoters, and non-stainless metals. Even small amounts of contaminants can make MEKP explosive. This reaction may start slowly, and gradually build-up heat, which can accelerate until fire or an explosion result. This process can take from seconds to days.

Heat applied to MEKP, or heat build-up from contamination reactions can cause it to reach what is called its Self-Accelerating Decomposition Temperature (SADT), which can cause fire or explosion.

Spills should be promptly removed, so no residues remain. Spillage can heat up to the point of self-ignition. Dispose in accordance with manufacture’s recommendation.

Store MEKP in a cool, dry and well-ventilated area in the original containers away from direct sunlight and away from other chemicals. It is strongly recommended that the storage temperature remain below 86° F (30° C). Heat will increase the potential for explosive decomposition. Refer to NFPA 432. Keep MEKP away from heat, sparks and open flames.

Current catalysts are premixed and do not require any diluents. GlasCraft strongly recommends that diluents not be used. Diluents add to the possibility of contaminants entering the catalyst system. Never dilute MEKP with acetone or any solvent since this can produce an extremely shock-sensitive compound which can explode.

Use only original equipment or equivalent parts from GlasCraft in the catalyst system (i.e.: hoses, fittings, etc.) because a hazardous chemical reaction may result between substituted parts and MEKP.

To prevent contact with MEKP, appropriate personal protective equipment, including chemically impermeable gloves, boots, aprons and goggles are required for everyone in the work area.

## Polyester Resins and Gel-Coats



Spraying materials containing polyester resin and gel-coats creates potentially harmful mist, vapors and atomized particulates. Prevent inhalation by providing sufficient ventilation and the use of respirators in the work area.

Read the material manufacturer’s warnings and material MSDS to know specific hazards and precautions related to polyester resins and gel-coats.

To prevent contact with polyester resins and gel-coats, appropriate personal protective equipment, including chemically impermeable gloves, boots, aprons and goggles are required for everyone in the work area.

## Spraying and Lamination Operations



Remove all accumulations of overspray, FRP sandings, etc. from the building as they occur. If this waste is allowed to build up, spillage of catalyst is more likely to start a fire.

If cleaning solvents are required, read material manufacture’s warnings and material MSDS to know specific hazards and precautions. (GlasCraft recommends that clean-up solvents be nonflammable.)



**GlasCraft** recommends that you consult OSHA Sections 1910.94, 1910.106, 1910.107 and NFPA No. 33, Chapter 16,17, and NFPA No. 91 for further guidance.

# Grounding



This equipment needs to be grounded.

Ground the spray gun through connection to a GlasCraft approved grounded fluid supply hose.

Check your local electrical code and related manuals for detailed grounding instructions of all equipment in the work area.



*A grounding wire and clamp are provided, assembly p/n 17440-00 with all FRP equipment.*



*The mast must be secured in the retracted position before transporting the system to prevent swinging of the mast and system imbalance.*

# Set-Up

## System Assembly



Any mounting option: cart mast & boom, floor mount, or wall mount etc. should be completely assembled before starting the following steps.

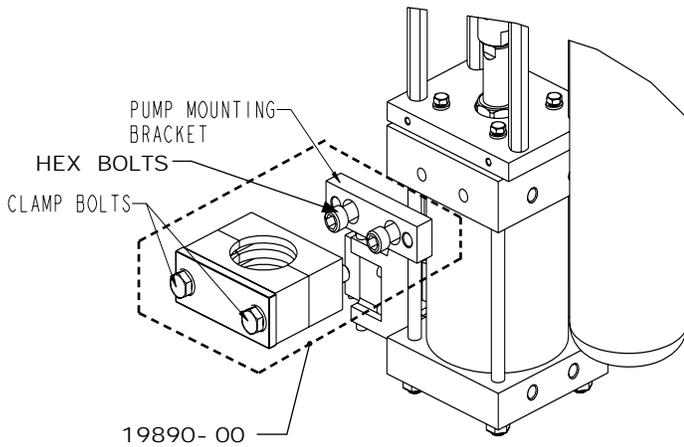
### Tools Required:

- 1) Standard wrench & socket set
- 2) Standard hex key set
- 3) Tape measure

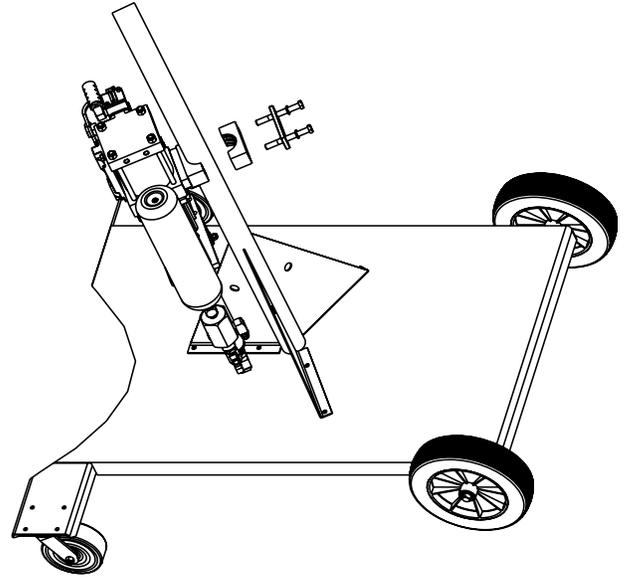


All "Required tools" are standard sizes.

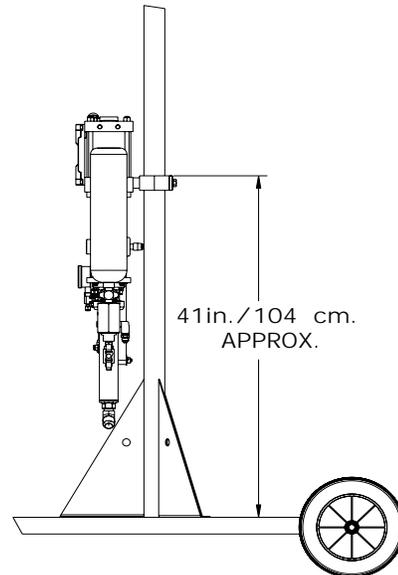
- 1. Loosen clamp bolts to expose pump mounting bracket. Attach pump mounting bracket to the air motor. Use thread locker on the threads and tighten hex bolts as tight as possible. (3/8in. hex key)



- 2. a. Stand the pump assembly next to the mast and install the pump mounting bracket.

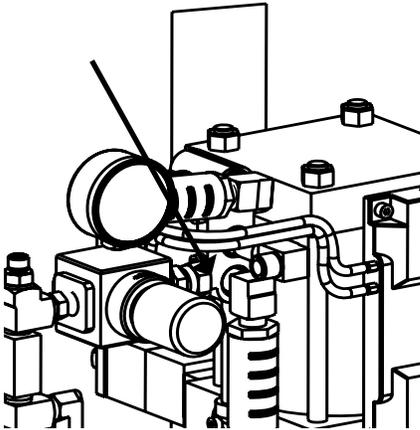


- b. Lift to desired height with the pump assembly facing the front of the cart as shown, approximately 41in. from the top of the cart to the top of the pump mounting bracket. Use 3/4in. wrench and tighten as tight as possible.

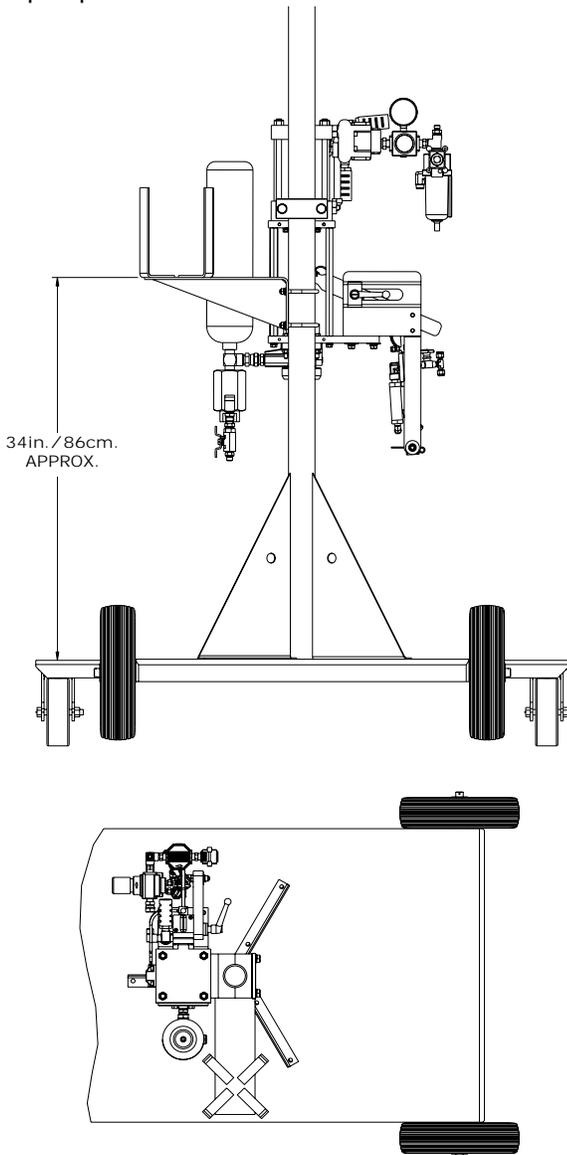


## Set-Up

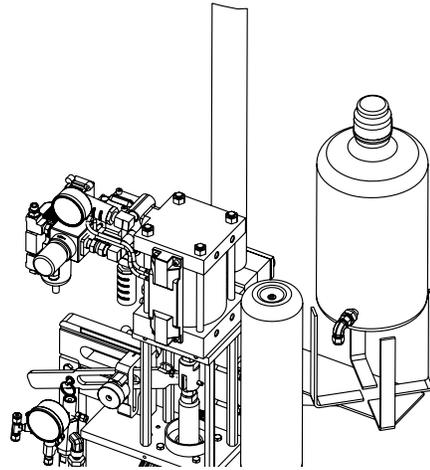
3. Attach air manifold p/n 23555-00 to the air motor.



4. Mount catalyst bottle bracket with supplied u-bolts p/n CP-126, 34in. from the top of the cart, to the top of the catalyst bracket and parallel with the material pump.

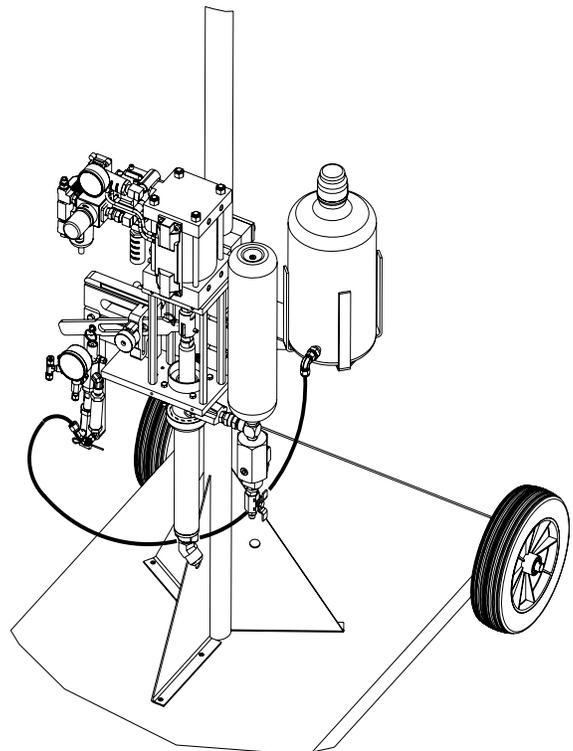


5. Install the catalyst jug with the elbow fitting facing the front of the unit.



6. Install tubing p/n 9704-11 from the catalyst jug to the inlet fitting on the catalyst pump. Push the tubing into the catalyst jug supply fitting until it stops. Using two proper sized wrenches, carefully tighten the compression nut to lock down the tubing.

 The tubing must be cut to desired length, giving a natural gravity feed supply to the slave pump.



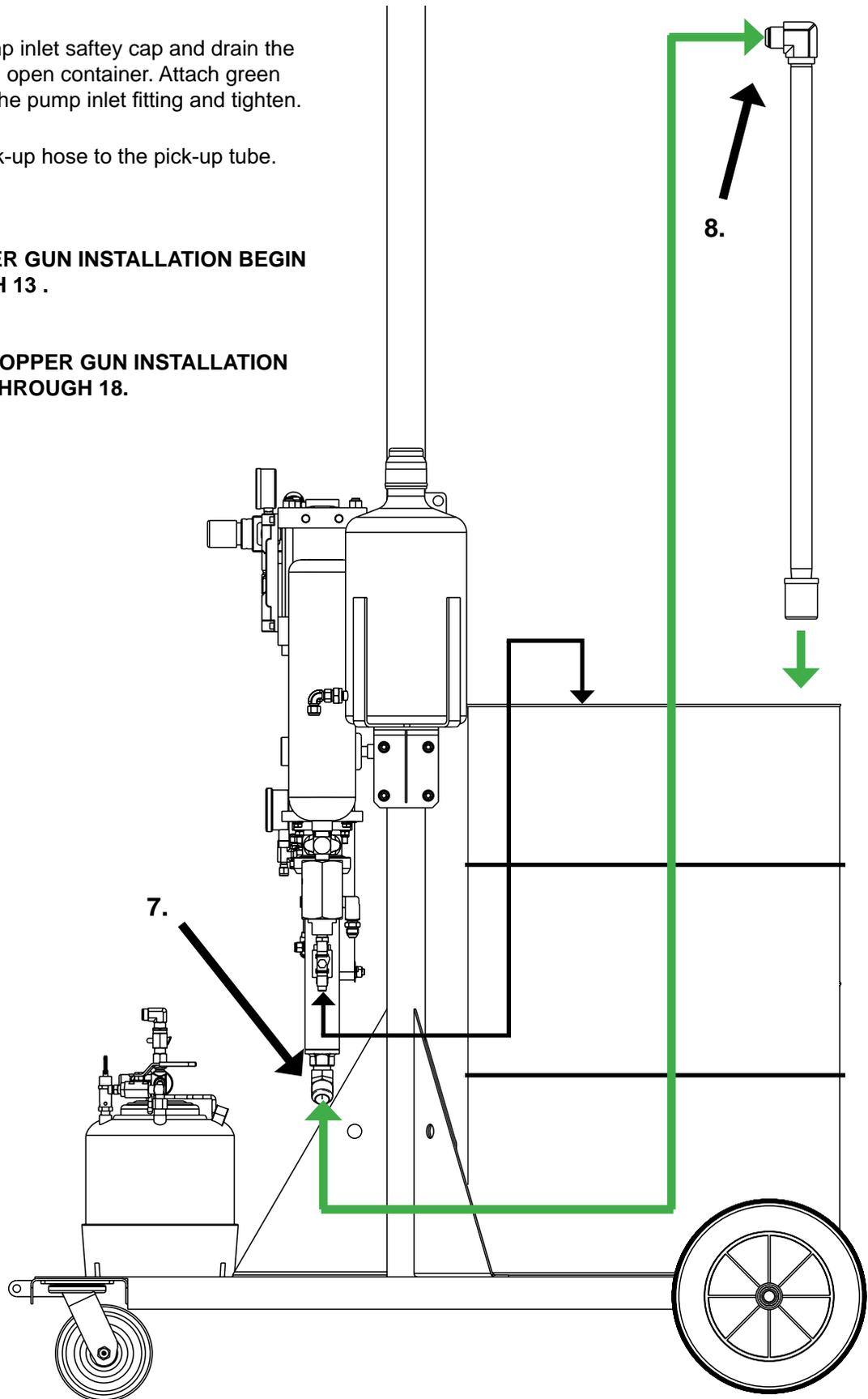
## Set-Up

7. Remove the pump inlet safety cap and drain the testing oil into an open container. Attach green pick-up hose to the pump inlet fitting and tighten.

8. Attach green pick-up hose to the pick-up tube.

**FOR INDY CHOPPER GUN INSTALLATION BEGIN STEPS 9 THROUGH 13 .**

**FOR FORMULA CHOPPER GUN INSTALLATION BEGIN STEPS 14 THROUGH 18.**



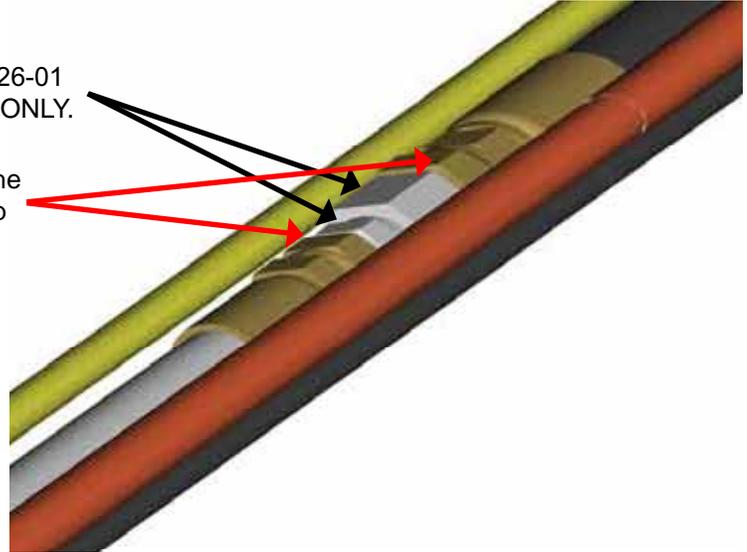
## Set-Up

### Indy Chopper Gun Option

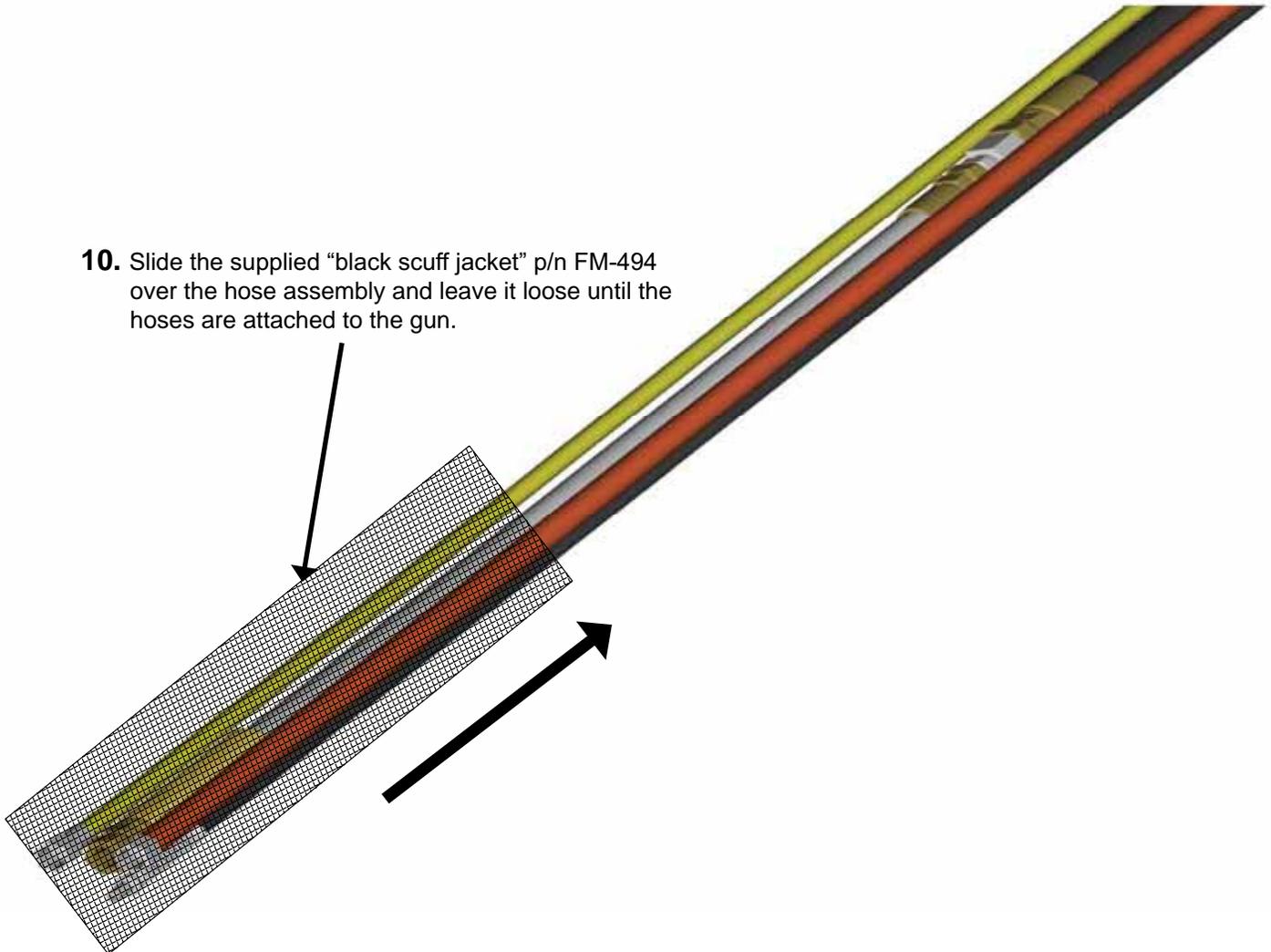
9. a. Lay all of the hoses out straight.

b. Install fittings p/n's 23523-00 and 14626-01 using PTFE tape on the NPT threads ONLY.

c. Install the assembly from step "b" to the material hose and attach the 3 ft. whip hose p/n H42503 to the other end.

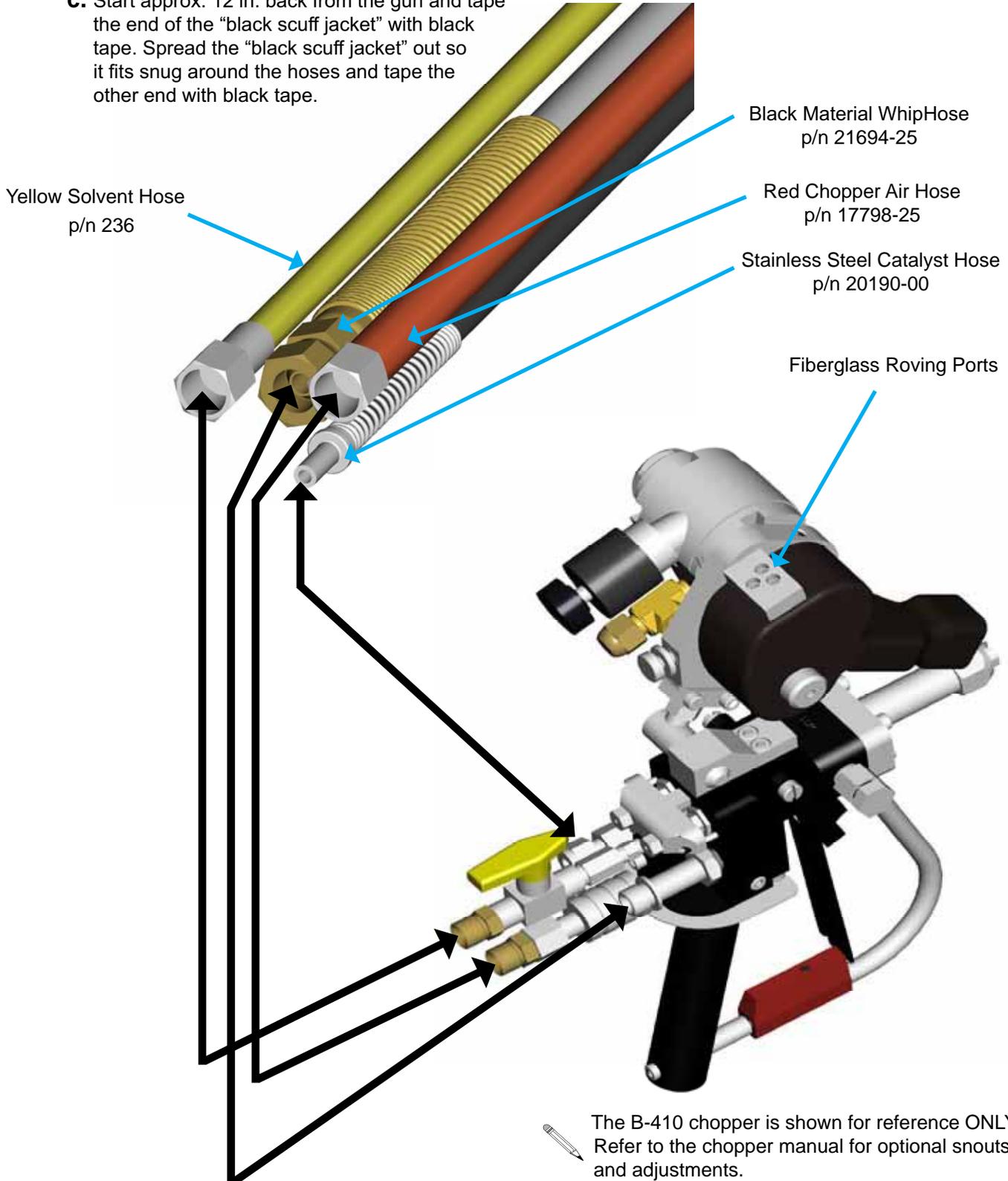


10. Slide the supplied "black scuff jacket" p/n FM-494 over the hose assembly and leave it loose until the hoses are attached to the gun.

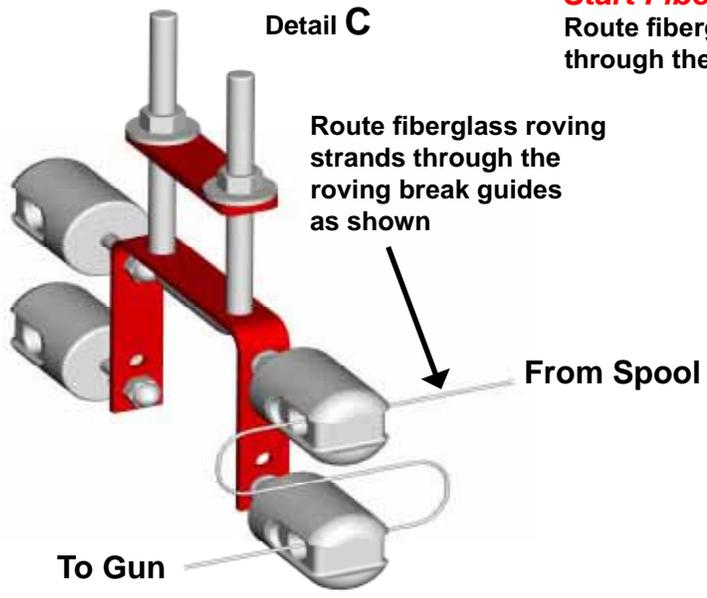
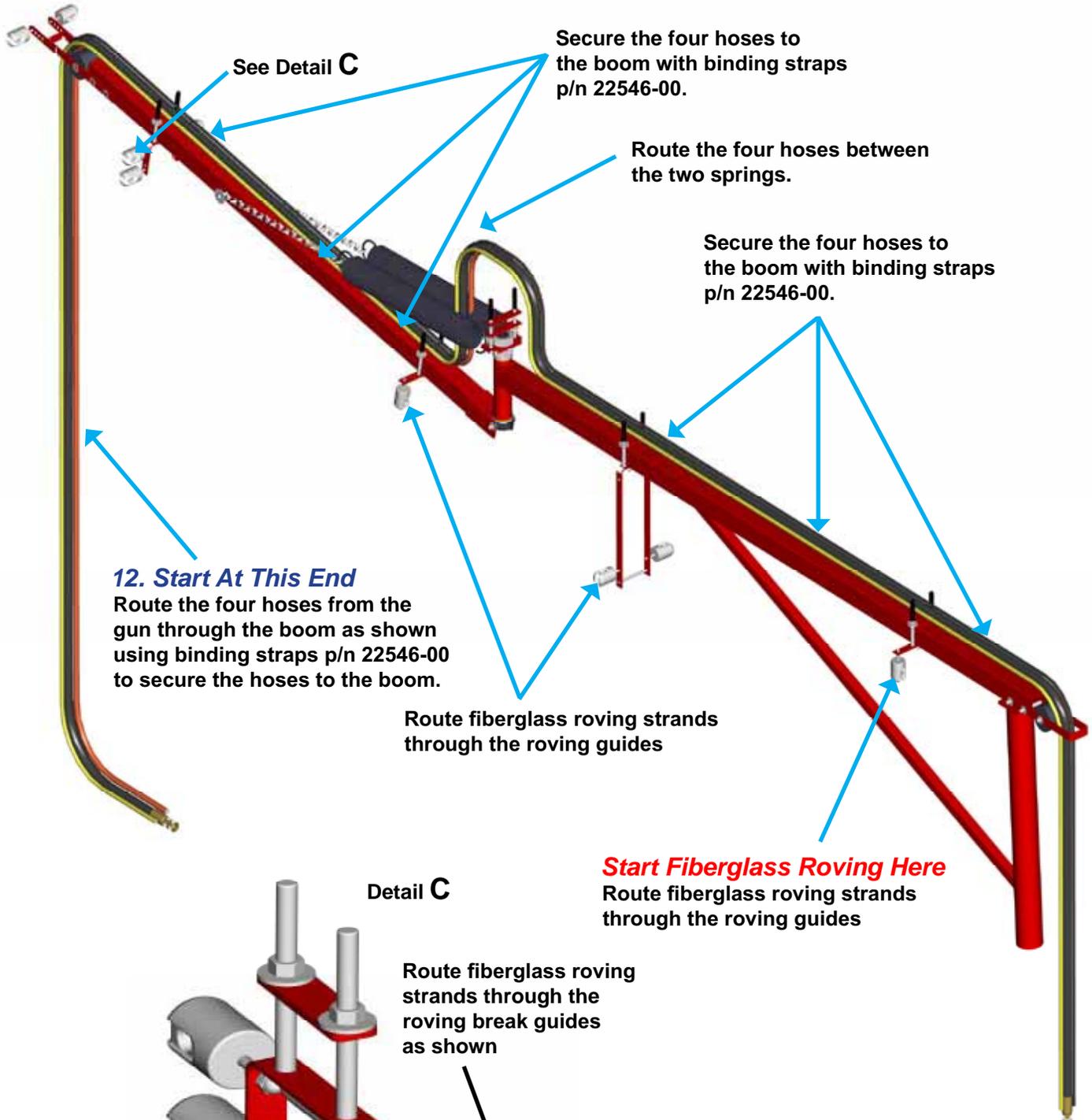


## Set-Up

11. **a.** Attach the hoses to the gun.
- b.** group the hoses together as shown and wrap them with tape about every 2 feet.
- c.** Start approx. 12 in. back from the gun and tape the end of the "black scuff jacket" with black tape. Spread the "black scuff jacket" out so it fits snug around the hoses and tape the other end with black tape.

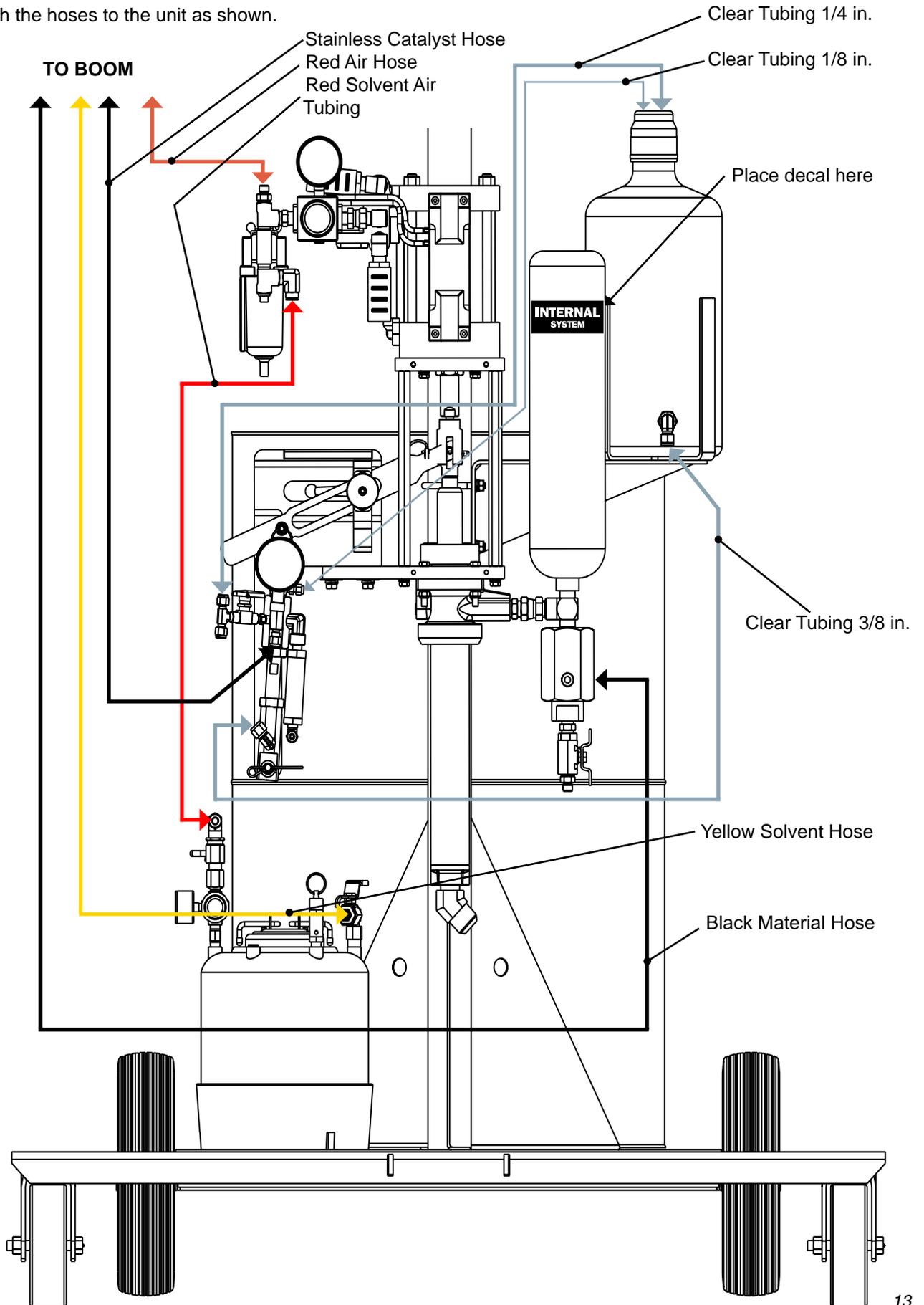


# Set-Up



# Set-Up

13. Attach the hoses to the unit as shown.



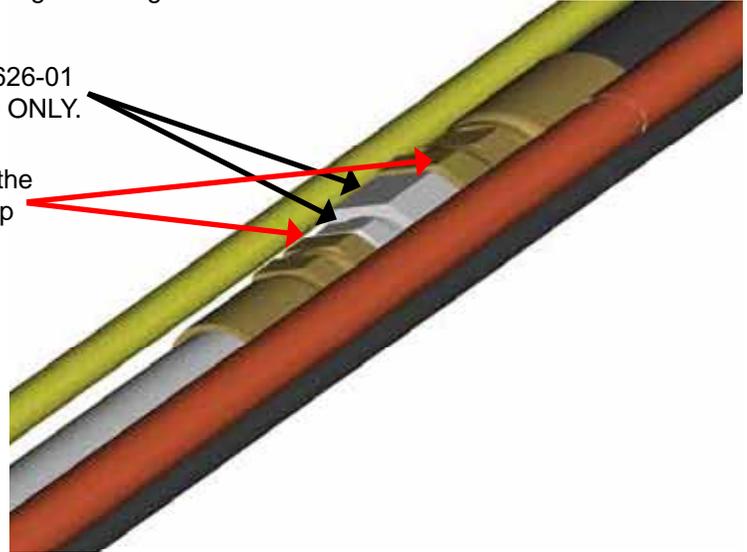
## Set-Up

### Formula Chopper Gun Option

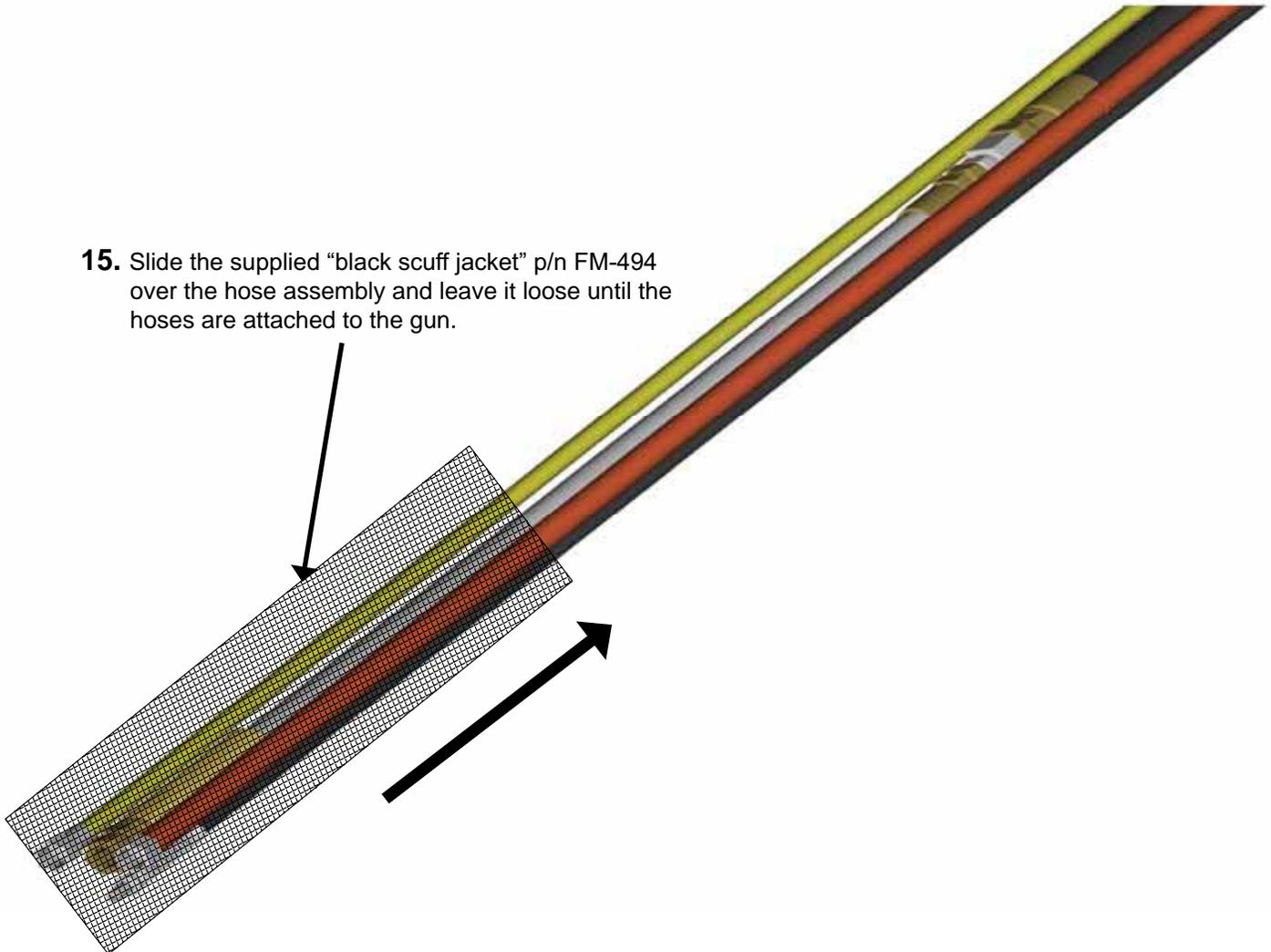
**14. a.** Lay all of the hoses and trigger air tubing out straight.

**b.** Install fittings p/n's 23523-00 and 14626-01 using PTFE tape on the NPT threads ONLY.

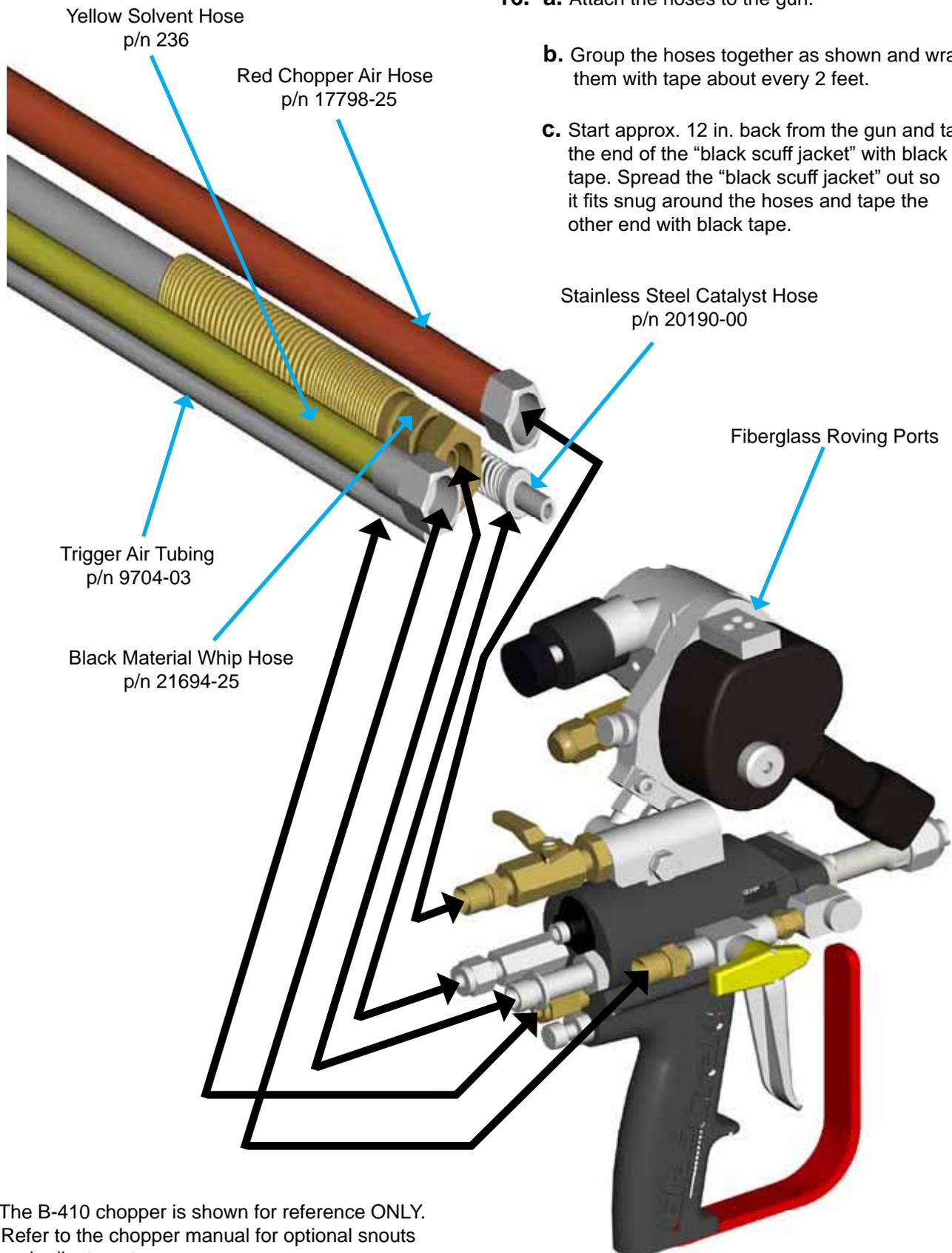
**c.** Install the assembly from step "B" to the material hose and attach the 3 ft. whip hose p/n H42503 to the other end.



**15.** Slide the supplied "black scuff jacket" p/n FM-494 over the hose assembly and leave it loose until the hoses are attached to the gun.



## Set-Up



**16. a.** Attach the hoses to the gun.

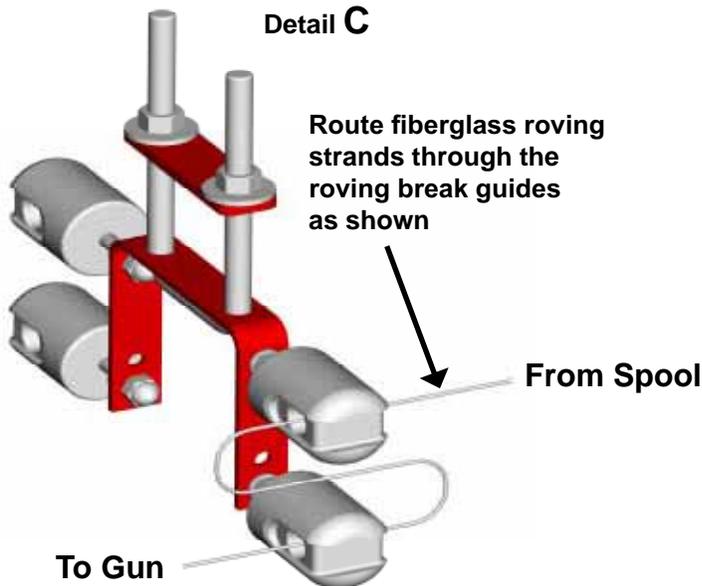
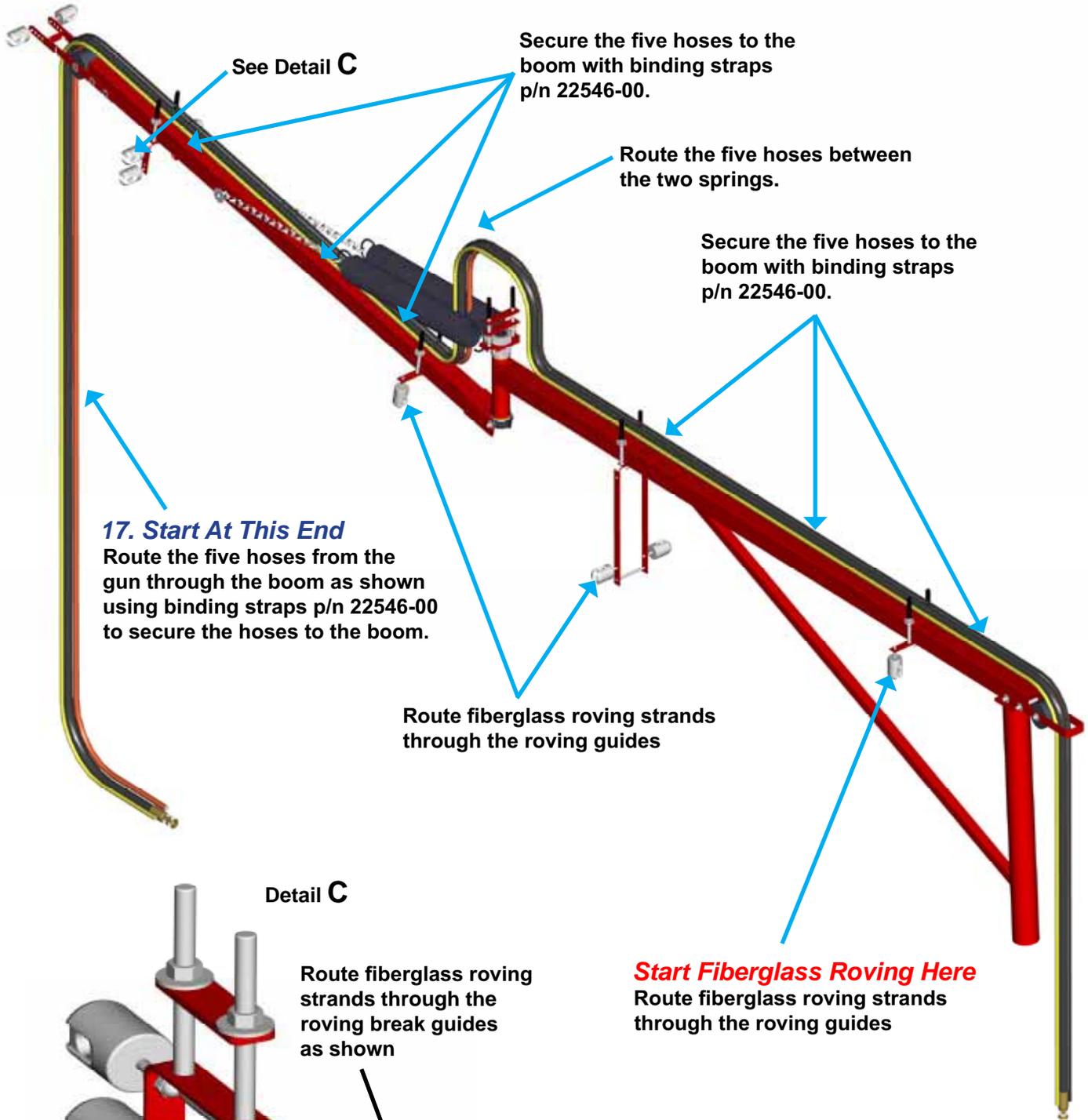
**b.** Group the hoses together as shown and wrap them with tape about every 2 feet.

**c.** Start approx. 12 in. back from the gun and tape the end of the "black scuff jacket" with black tape. Spread the "black scuff jacket" out so it fits snug around the hoses and tape the other end with black tape.



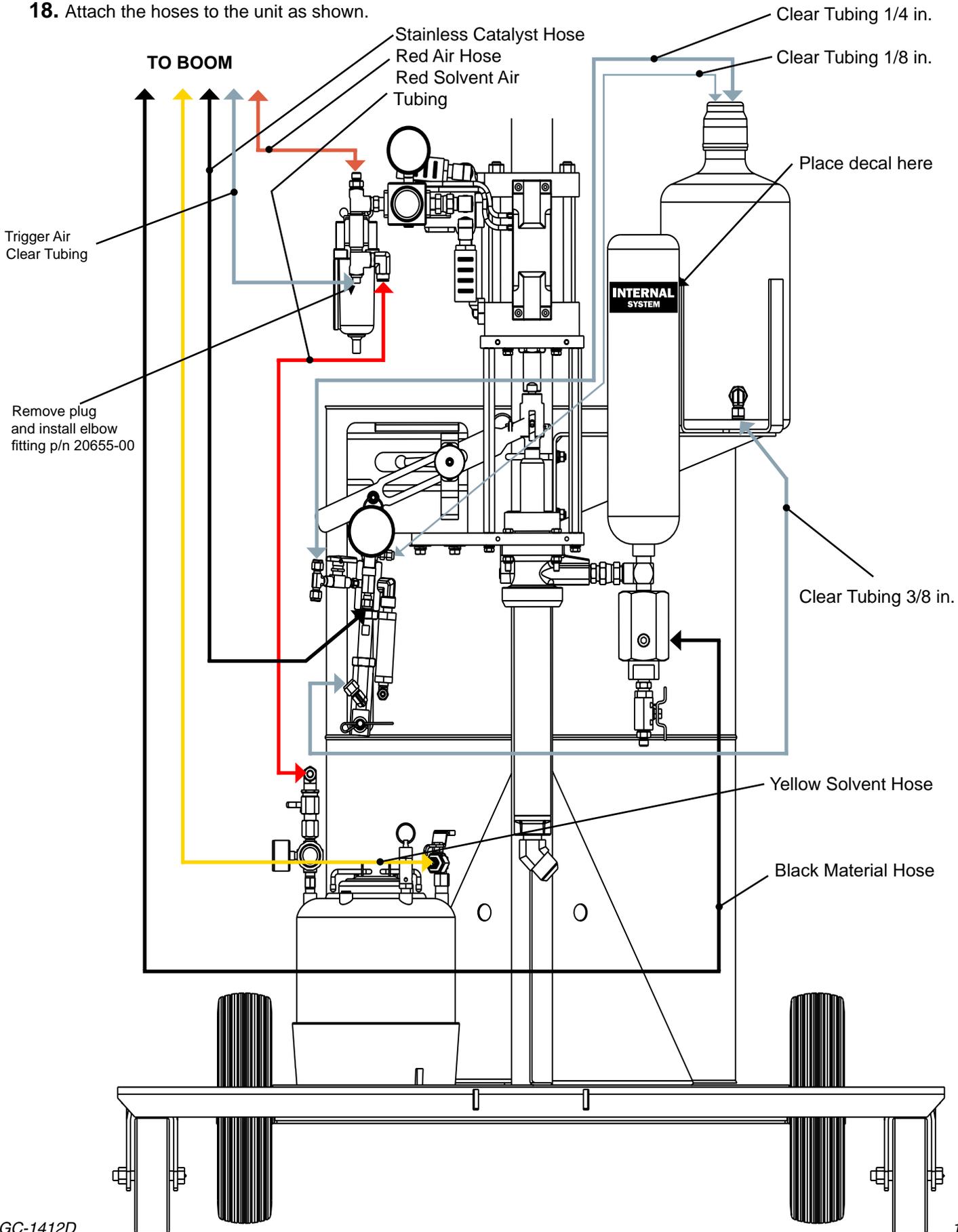
The B-410 chopper is shown for reference ONLY. Refer to the chopper manual for optional snouts and adjustments.

# Set-Up



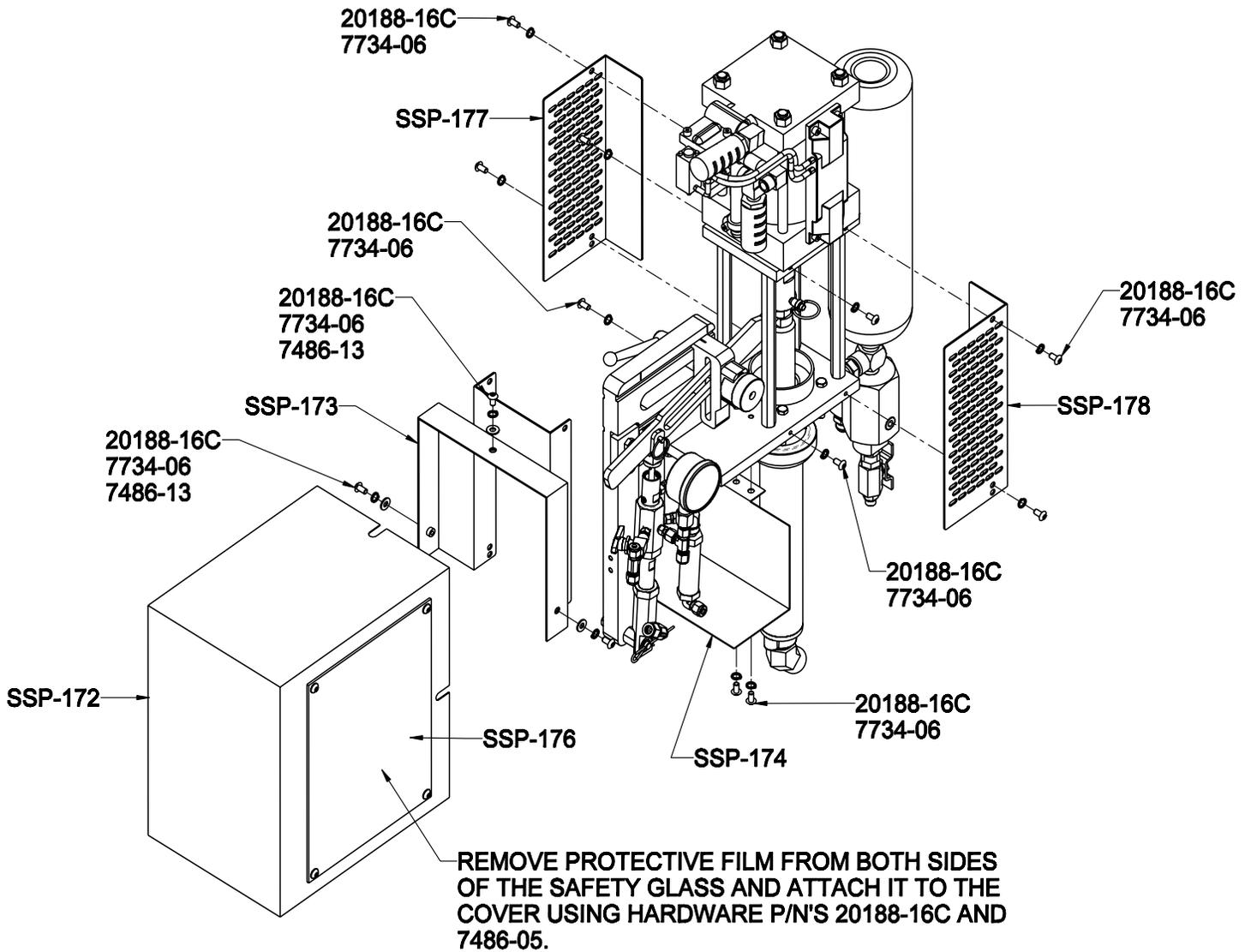
# Set-Up

18. Attach the hoses to the unit as shown.



# Set-Up

## SSP-175 Safety Guard Kit



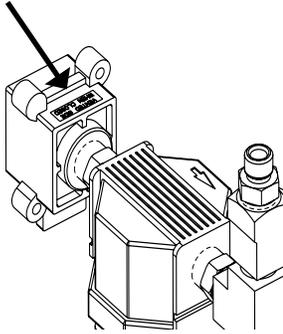
SSP-175		
Part Number	Description	Qty.
SSP-172	SURROUND GUARD	1
SSP-173	LEFT PUMP GUARD	1
SSP-174	ANGLE BRACKET	1
SSP-176	GUARD WINDOW	1
SSP-177	RIGHT PUMP GUARD	1
SSP-178	RIGHT FRONT PUMP GUARD	1
20188-16C	SCREW	17
7486-05	FENDER WASHER	4
7486-13	WASHER	3
7734-06	LOCK WASHER	13

## Pressure Relief Procedure

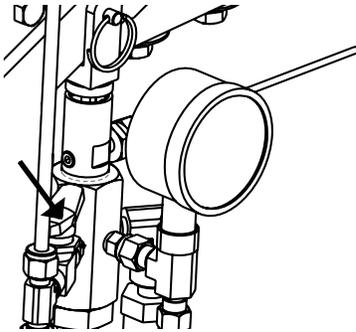


To relieve fluid and air pressures:

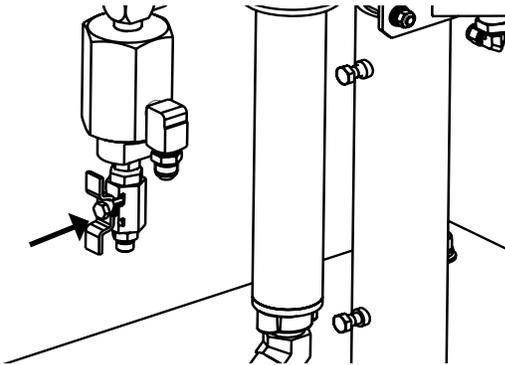
1. Push down Yellow slide valve, P/N 21402-00 to bleed off air to system.



2. Open P/N 21228-00 on catalyst pump to recirculation position.



3. Open P/N 21192-00 on bottom of material pump.

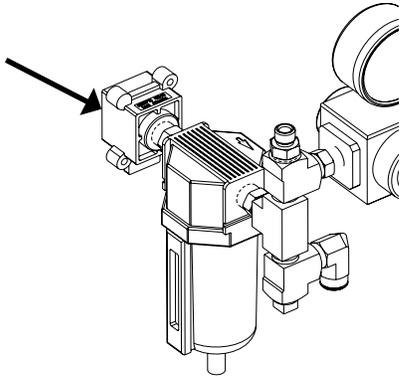


# Start-Up

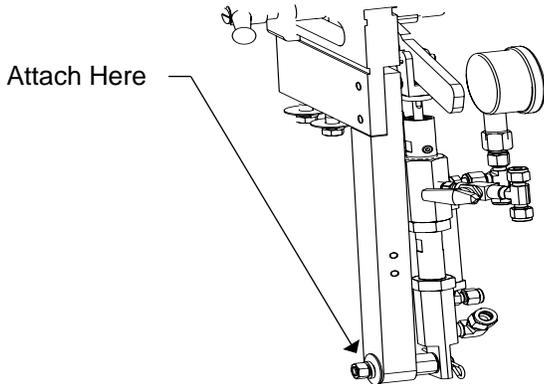
The following assumes that all connections are tight.

## System Start-Up Instructions

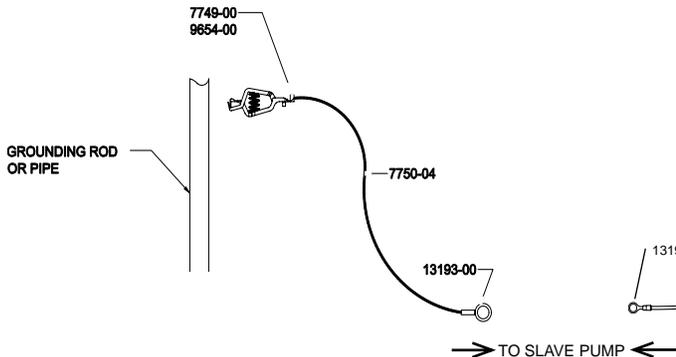
1. Select a clean dry air supply.
2. Attach a 3/8" or larger air hose to the Air Manifold Inlet. **Do not use quick disconnect fittings.**



3. Attach grounding clamp assembly, P/N 17440-00, to the slave pump.

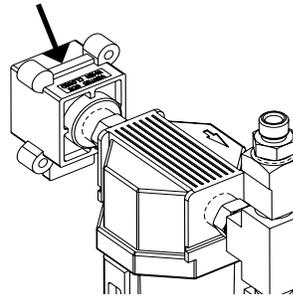


4. Securely attach Clamp, P/N 7749-00, to permanently grounded rod or pipe.



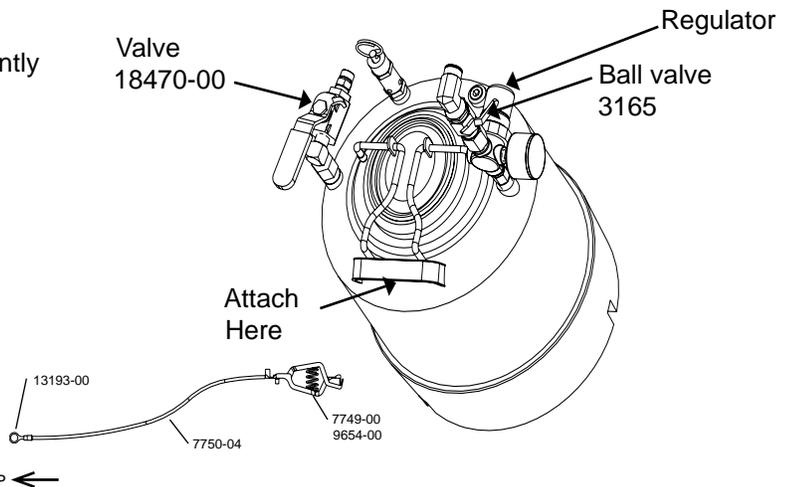
Before turning on main air, check all On/Off Ball Valves, making certain all Valves are in the "Off" position and set all regulators in their "Off" position. (Turn knob counter-clockwise for OFF or reduced pressure setting.)

5. Place the mixing element straight into the front gun housing. (refer to spray gun user manual)
6. Place the retaining nut along with the spray tip and spray tip spacer onto the gun housing. (refer to spray gun user manual)
7. Push the slide valve to the open position.



8. Open the air valve p/n 3165 on the solvent tank and adjust the solvent pressure to 90 PSI (6.2 bar). Open the ball valve p/n 18470-05 on the solvent tank. Next open ball valve p/n 23518-00 on the gun to verify that solvent will flow out of the front of the gun through the dispense tip, then close the valve.

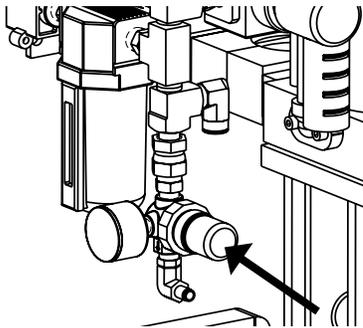
*Do not exceed 20 PSI (1.4 bar) on the material regulator until a steady material flow has been established.*



# Start-Up

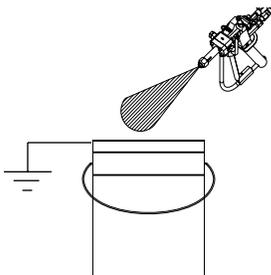
- SSP-160-01
- 9a. Pull and rotate Pivot knob to disengage the catalyst drive arm.
  - b. Turn the slave pump yellow ball valve to the open position.
  - c. Hand prime the pump until a steady stream of catalyst flows back to the bottle.
  - d. Close the ball valve. Hand stroke the pump until it develops 300-400 PSI (21-28 bar).
- 

*If you are using the optional Formula gun set the trigger air regulator to 100 PSI (7 bar). **The trigger air IS NOT to exceed 100 PSI (7 bar).***

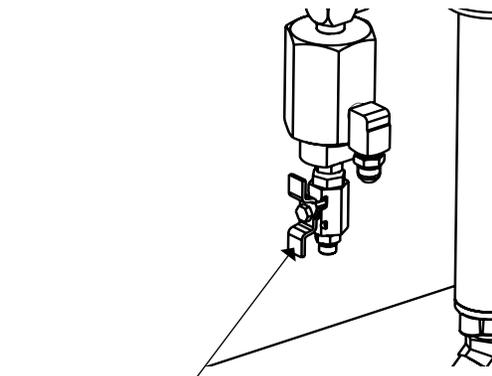


10. Trigger the Gun into a container until all the air is purged from the resin side of the system. It may be necessary to Hand stroke the Catalyst Pump several times while the gun is triggered to positively deliver a steady stream of catalyst. Let go of the trigger and hand stroke pump again to develop 300-400 PSI (21-28 bar). "STOP"

- a. Solvent flush the gun. "STOP"

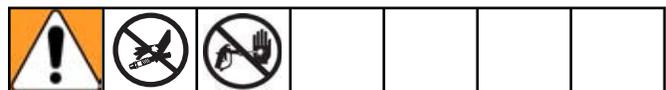
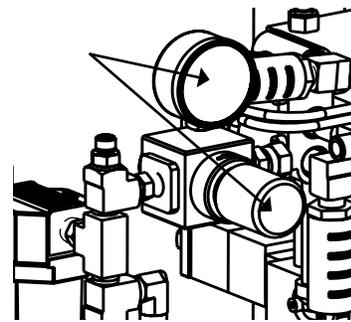


- b. Once primed, increase the resin PSI until a desired spray pattern is achieved.
  - c. After all pressure adjustments have been completed, a final spray test should be made. Spray a test shot sample on a clean piece of paper. The shot should be approximately five feet in length. You can now check desired gel times and uniformity of curing.
  - d. Flush the gun thoroughly with solvent after use.
11. Make sure that the resin pump recirculation valve is "off" and that the bypass hose is in back in the the drum. Adjust the resin pump regulator to 20 PSI (1.4 bar) the pump will start to slowly cycle. Allow the pump to "load" the cycle rate should slow indicating the pump is primed. Close the recirculation valve.



Recirculation Valve

Resin Pump Regulator



*Do not exceed 20 PSI (1.4 bar) pressure on the Material Regulator until steady material flow has been established.*

# Shut-down

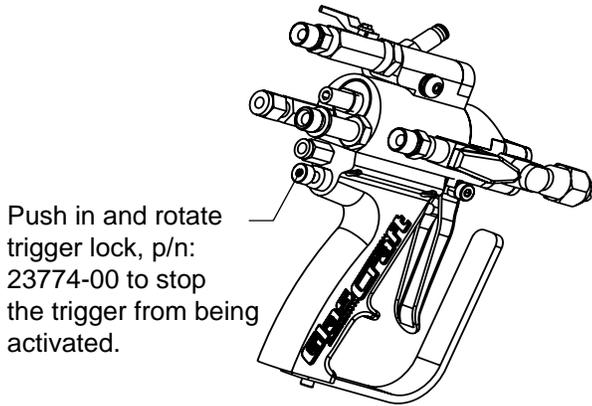
## Shut-Down Instructions

### Notice

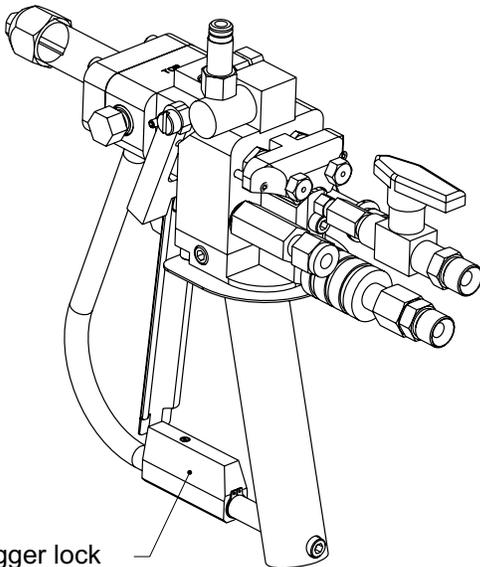
Due to the different O-Ring materials and lubricants used in the Guns never submerge or soak any dispense gun in any type of solvent!

Submerging or soaking any Gun will immediately void the Gun warranty.

1. Activate trigger lock to stop the trigger from being activated. Refer to gun manuals if needed.



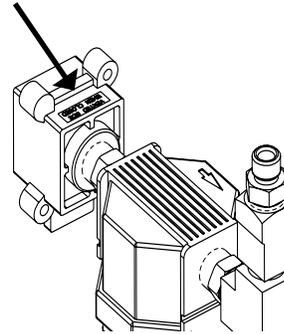
### Formula Gun



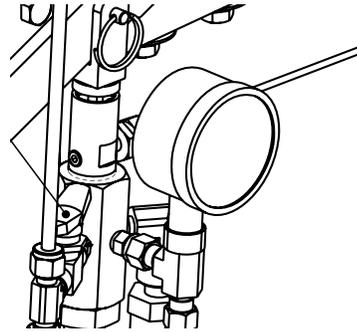
Rotate trigger lock to stop the trigger from being activated.

### Indy Gun

2. Push down the yellow slide valve, P/N 21402-00 on the inlet air to bleed off air on system.



3. Turn catalyst yellow ball valve, P/N 21228-00 to Open / Recirculation position to dump psi. and close the valve.



4. Pressure should be maintained on the resin hose.

 If you are using the Indy gun install the night plug p/n 23527-00.

 Refer to gun manuals for service and maintenance.

## Parts

### Model - Internal Mix Fiberglass Roving Chopper System

<b>Standard Equipment</b>	
<b>Part Number</b>	<b>Description</b>
SSP-160-01	SUPER CATALYST SLAVE PUMP ASSEMBLY
GAM-268-01	MATERIAL PUMP PICK-UP KIT
21694-25	MATERIAL HOSE ASSEMBLY, 25 FT.
17440-00	GROUNDING CLAMP ASSEMBLY
23555-00	AIR MANIFOLD
17798-25	AIR HOSE 25 FT.
20190-00	CATALYST HOSE 25 FT.
236	SOLVENT HOSE 25 FT.
20794-01	SOLVENT TANK
19890-01	MOUNTING CLAMP
770 / 754-1 / 750-01	CART MAST & BOOM
H42503	MATERIAL WHIP HOSE 3FT.
GC-1412	MANUALS
LPA-165	CATALYST BOTTLE
LPA-170	CATALYST BOTTLE BRACKET
9704-03	TRIGGER AIR TUBING (1/4in. CLEAR, 28ft. FORMULA GUN ONLY)

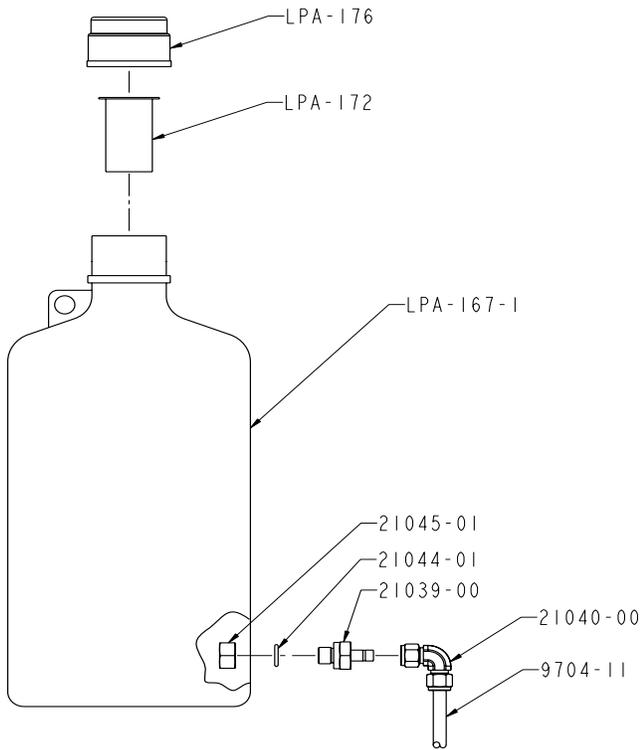
<b>Pump Options</b>	
<b>Part Number</b>	<b>Description</b>
20864-05	MATERIAL PUMP ASSEMBLY, 11:1 RATIO
21780-01	MATERIAL PUMP ASSEMBLY, 17:1 RATIO
22026-01	MATERIAL PUMP ASSEMBLY, 20:1 RATIO

### Material Spray Nozzles

See gun manuals for spray tip options.

# Sub-Assembly Drawings

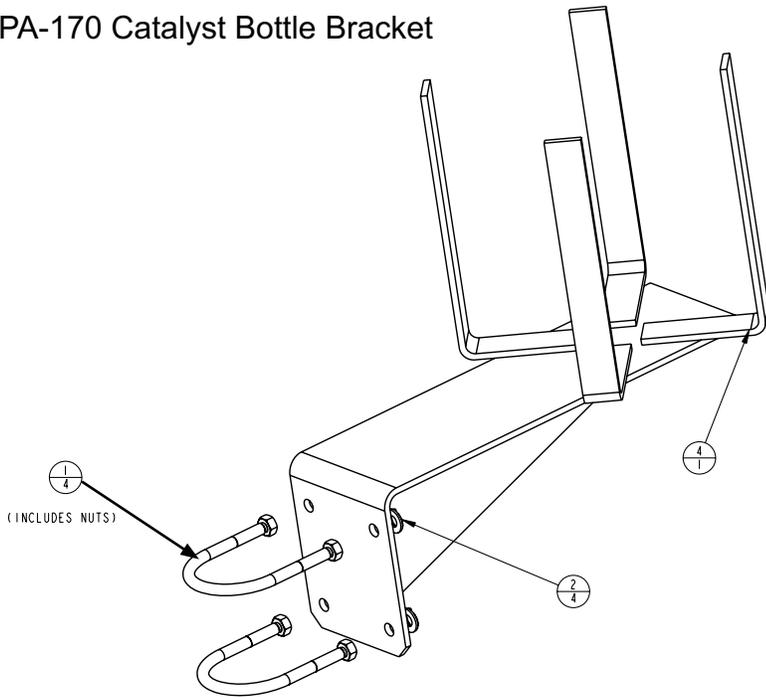
## LPA-165 Bottle



Part Number	Description	Qty.
LPA-167-1	BOTTLE	1
LPA-172	SCREEN	1
LPA-176	CAP	1
21039-00	TUBE ADAPTER	1
21040-00	ELBOW FITTING	1
21044-01	SEAL	1
21045-01	HEX NUT	1
9704-11	TUBING	5

**REVISION N**

## LPA-170 Catalyst Bottle Bracket

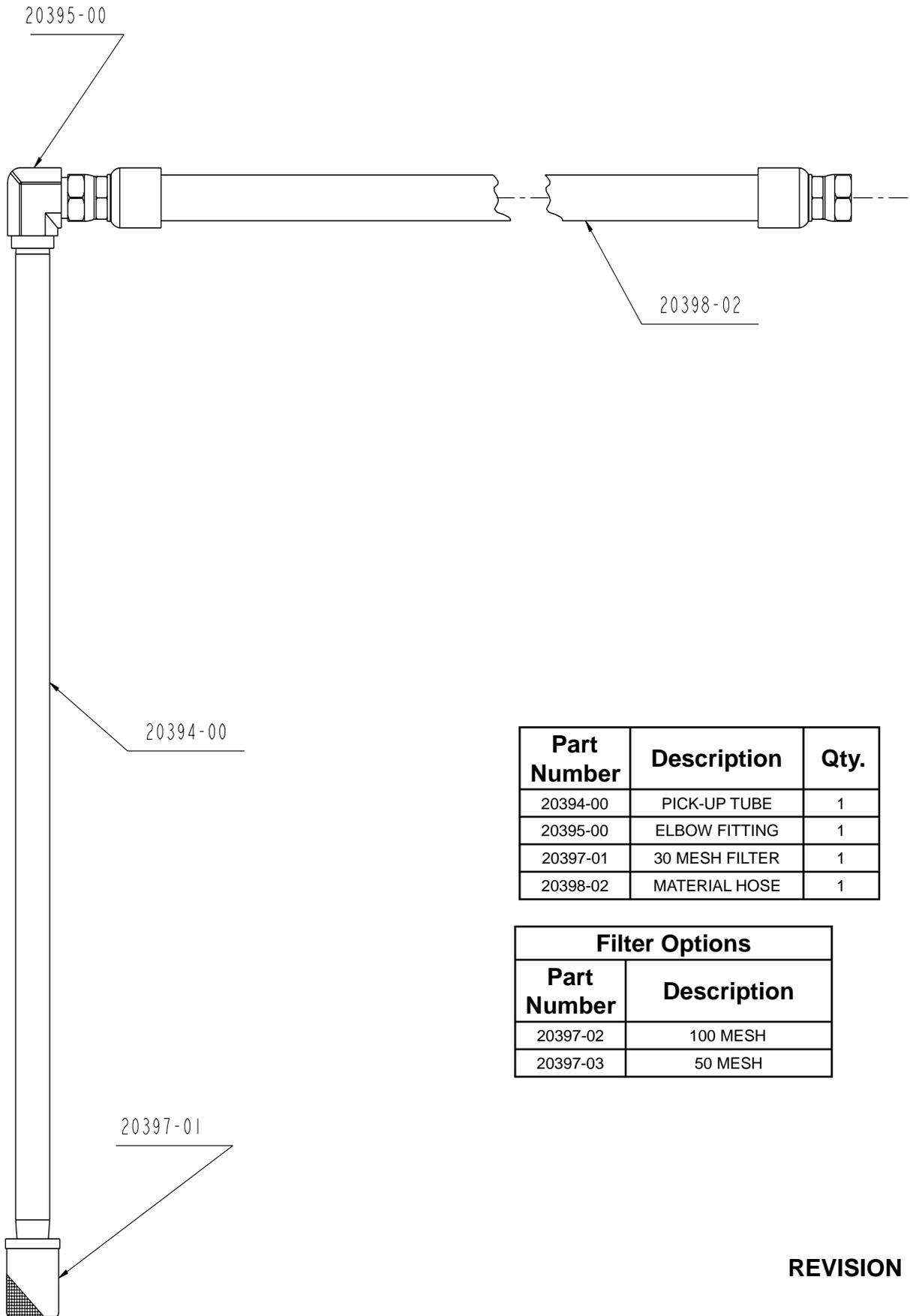


PRODUCT STRUCTURE		
INDEX	PART NUMBER	QTY
1	7486-07	4
2	7734-07	4
3	CP-126	2
4	LPA-169	1

**REVISION B**

# Sub-Assembly Drawings

## GAM-268-01 Material Pick-Up Kit



Part Number	Description	Qty.
20394-00	PICK-UP TUBE	1
20395-00	ELBOW FITTING	1
20397-01	30 MESH FILTER	1
20398-02	MATERIAL HOSE	1

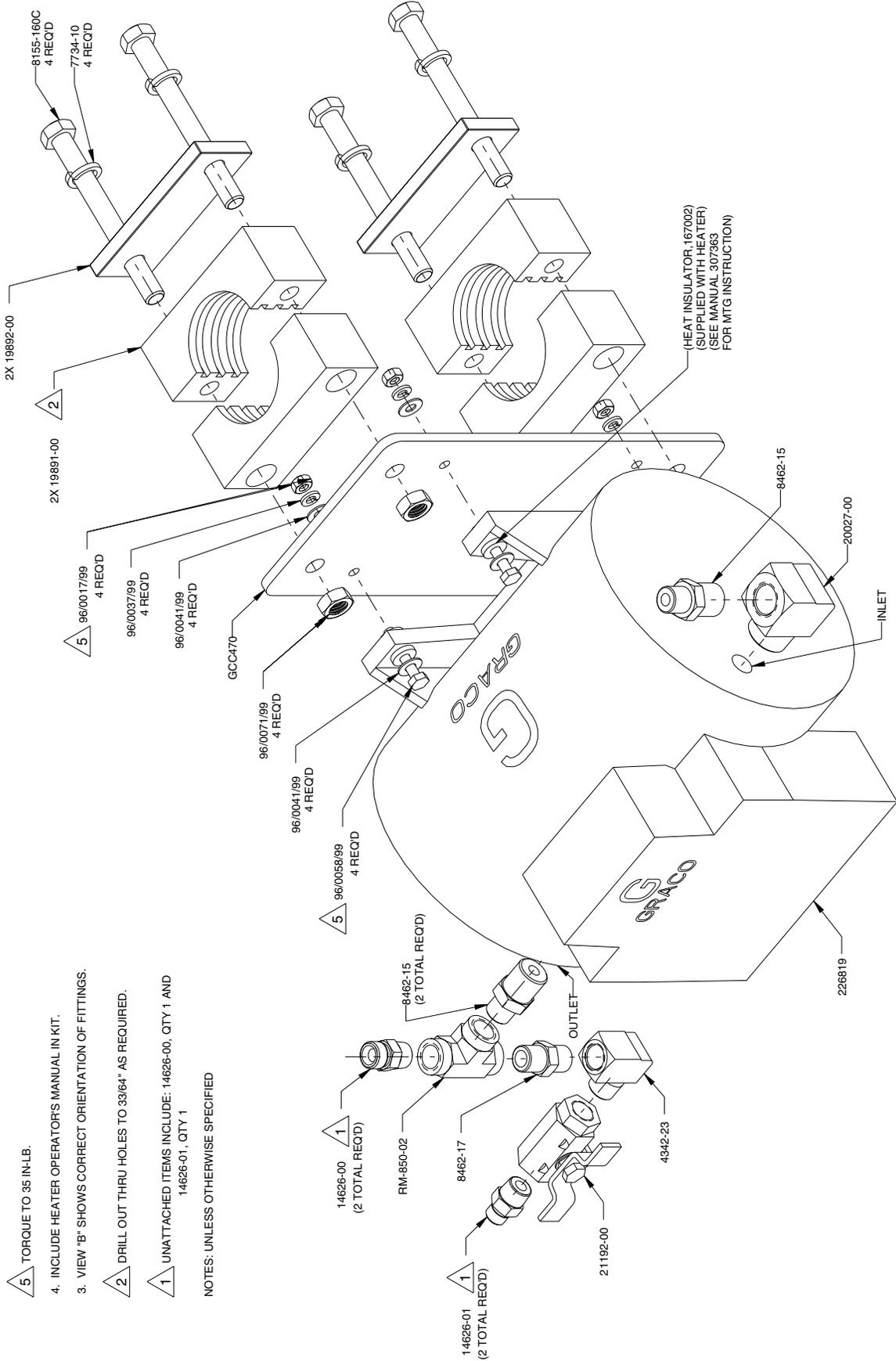
Filter Options	
Part Number	Description
20397-02	100 MESH
20397-03	50 MESH

REVISION D



# Sub-Assembly Drawings

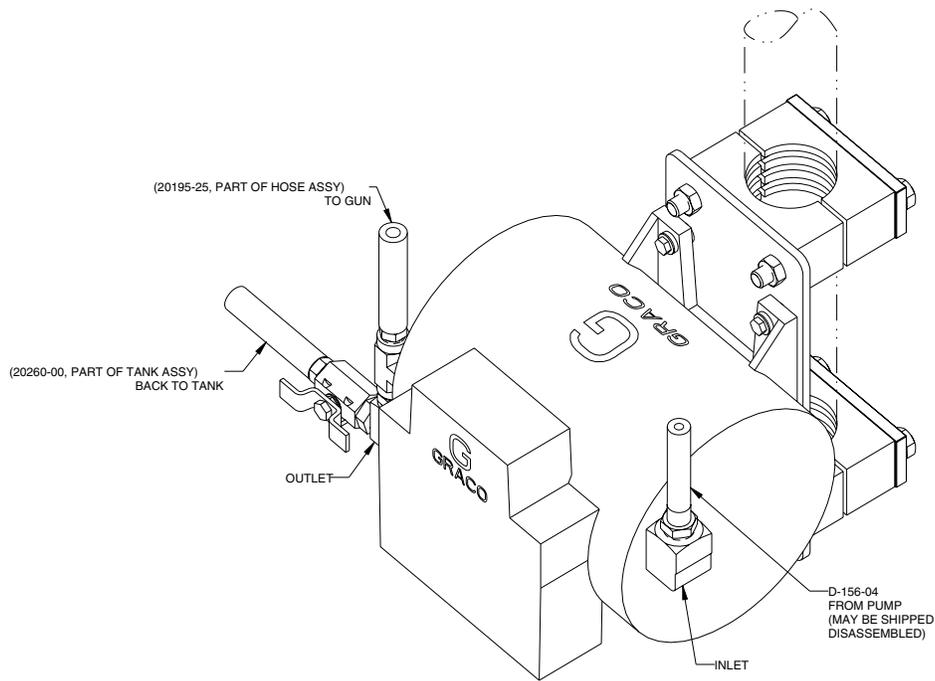
## 21460-00 Heater Conversion Kit Assembly



- 5 TORQUE TO 35 IN-LB.
  - 4. INCLUDE HEATER OPERATOR'S MANUAL IN KIT.
  - 3. VIEW 'B' SHOWS CORRECT ORIENTATION OF FITTINGS.
  - 2 DRILL OUT THRU HOLES TO 33/64" AS REQUIRED.
  - 1 UNATTACHED ITEMS INCLUDE: 14626-00, QTY 1 AND 14626-01, QTY 1
- NOTES: UNLESS OTHERWISE SPECIFIED

# Sub-Assembly Drawings

## 21460-00 Heater Conversion Kit Assembly



Part Number	Description	Qty
D-156-04	HOSE, ASSY	1
RM-850-02	FITTING, PIPE, TEE, 3/8	1
14626-00	FITTING, 3/8NPT X 3/8 NPS	2
14626-01	FITTING, 3/8NPT X 1/4 NPSM	2
19891-00	CLAMP, PIPE, SET	2
19892-00	PLATE, COVER, CLAMP	2
20027-00	FITTING, ELBOW, 1/2NPTM X 1/2NPTF CP	1
226819	HEATER, VISCON (240 VOLT)	1
21192-00	VALVE, BALL, 2-WAY, 3/8	1
GCC470	PLATE, HEATER, MOUNTING	1
96/0017/99	NUT, HEX, 1/4-20, MS, GR2	4
4342-23	FITTING, ELBOW, 3/8 NPTM X 3/8 NPTF	1
7734-10	WASHER, LOCK, SPRING, 1/2	4
8155-160C	SCREW, HXHD, CS, .500-13X5.000ZP	4
8462-15	FITTING, PIPE, NIPPLE, HEX, 1/2 X 3/8 NPT	2
8462-17	FITTING, PIPE, NIPPLE, HEX, 3/8 X 3/8 NPT	1
96/0071/99	NUT, HEX, 1/2-13, MS, GR2	4
96/0037/99	WASHER, LOCK, SPLIT, 1/4, MS	4
96/0041/99	WASHER, FLAT, 1/4, 0.28 X 0.63 X 0.065	8
96/0058/99	SCREW, HHC, 1/4-20 X 1.50, MS, GR5	4

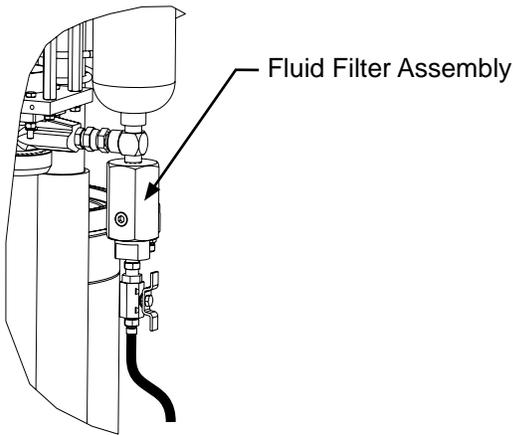
# Maintenance

							
<p>Before performing any maintenance on this Dispense Gun - Follow pressure relief procedures on page 19.</p>							

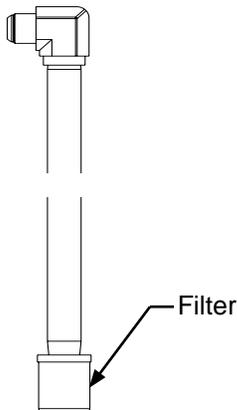


See Indy and Formula gun manuals for daily maintenance and parts replacement procedures.

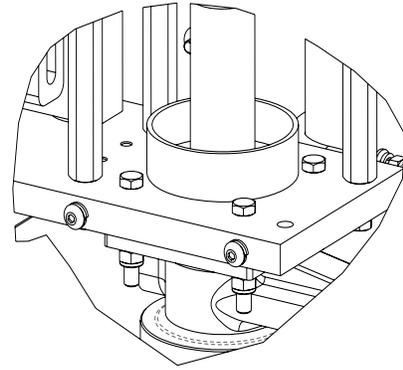
1. Clean filter at resin pump. When opening pump relief valve, make sure all resin and air is evacuated from surge bottle.



2. Inspect and clean filter on pick-up wand.



3. Clean pump lube cup and add fresh pump lube.



## Technical Data

Category	Data
Maximum Fluid Working Pressure (20864-05)	1300 psi (9 MPa, 90 bar)
Maximum Fluid Working Pressure (21780-01)	1700 psi (12 MPa, 117 bar)
Maximum Fluid Working Pressure (22026-01)	2000 psi (14 MPa, 138 bar)
Maximum Air Inlet Pressure	100 psi (0.7 MPa, 7 bar)
Typical Flow Rate of Pattern Guns	Refer to gun manual
Maximum Fluid Temperature	100° F (38° C)
A Component (Catalyst) Inlet Size	1/4 in. Tube
B Component (Resin) Inlet Size	1 5/16-12 UN-2A Male
Sound Pressure (20864-05)	84.83 dB(A)
Sound Pressure (21780-01)	85.47 dB(A)
Sound Pressure (22026-01)	84.83 dB(A)
Sound Power, measured per ISO 9614-2 (20864-05)	87.04 dB(A)
Sound Power, measured per ISO 9614-2 (21780-01)	91.66 dB(A)
Sound Power, measured per ISO 9614-2 (22026-01)	87.04 dB(A)
Dimensions	88 L X 32 W X 18 H ( 2235.2 X 812.8 X 457.2 mm)
Weight	215 Lbs. (98 kg)
Wetted Parts	Catalyst- Chemically coated aluminum, stainless steel, chemically resistant o-rings. Resin- Carbon steel, carbide, chemically resistant o-rings.



# Graco Ohio Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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# Graco Ohio Information

**TO PLACE AN ORDER**, contact your Graco distributor or call to identify the nearest distributor.  
**Phone:** 1-800-746-1334 or **Fax:** 1-330-966-3006

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*This manual contains English. GC-1412*

**Graco Headquarters:** Minneapolis

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