

DCD

Dual Cartridge Dispenser

Operation Manual



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General Information

Overview

The DCD dual cartridge dispenser provides the dispensing of 2-part materials from standard 50ml, 200ml and 400ml 2-part, side-by-side cartridges.

Available models:

	DP50-1	DP200-1	DP400-1
Cartridge Size	50ml	200ml	400ml
Digital Timer	Sold Separately	Sold Separately	Sold Separately

Available modes of use include:

- Foot pedal actuated, operator shot control, dispensing from a mixing nozzle.
- Foot pedal actuated, operator shot control, dispensing from a pinch tube valve.
- Foot pedal actuated, timed shot control, dispensing from a pinch tube valve (external dispenser control box with digital display timer required).

The system may ship with 50ml, 200ml or 400ml size dispenser tool. The dispensing tool comes with its own instruction manual, and should be read before attempting to use this equipment.

The pinch tube valve comes with its own instruction manual, and should be read before attempting to use this equipment.

If an external dispenser (i.e. model SL101N or DC100) option is purchased, it comes with its own instruction manual, and should be read before attempting to use this equipment

Limitations of Use

Please read this document and all information regarding the equipment before handling the equipment.

Do not use this equipment for anything other than its intended use. Do not modify, change, or alter the equipment in any way. Attempts to alter or modify this equipment will void the warranty.

If you are unsure of the intended use and the limitations of use for the equipment, contact your Fisnar representative before handling the equipment.

This instruction manual pertains to an unmodified standard system, and does not include any changes made to suit a particular application.

Owners Responsibility

The owner of the equipment is under obligation to read and adhere to all operation manuals & ensure that all personnel who will handle, install, maintain, operate, fix, and work around the equipment are qualified, trained, and up-to-date with all information regarding the equipment.

Safety Precautions

Read all operation manuals carefully prior to handling any piece of equipment.



Wear protective equipment such as glasses, gloves, clothing, and mask as recommended by the material manufacturer.



Use caution with hands and fingers while adjusting mounting collars.

The MSDS (material safety data sheet) of the material being dispensed should be read completely before being used.



The following cautions apply:

- The system should only be operated by experienced personnel in accordance with industrial safety regulations.
- Use only within the intended use of the machinery.
- In the event of accident or malfunction, disconnect air pressure lines.
- Ensure that the unit is securely positioned on a flat surface which will support the weight of the system.
- Supply compressed air according to the system specifications.
- Operate the unit in a safe and secure area.
- The unit should only be operated by trained and qualified personnel.
- Cleaning and inspection of the unit should only be performed after disconnecting the air pressure supply.
- Check for any hindrance of other apparatus that may interfere with the unit before operation.
- Install at a safe distance from other equipment.
- The unit is considered properly packed for transport when repacked as it was received.

Maximum Air Pressure

The maximum dispense air pressure is 87psi for the 50ml, 200ml and 400ml dispensing tools. This is adjusted and displayed on the front of the control box.

The maximum input air pressure for the DCD is 100psi. This is adjusted and displayed on the rear of the control box.

Please see separate operation manuals for any additional equipment purchased.

Equipment Overview

Components

The DP50-1, DP200-1 and DP400-1 carton includes:

- Main Equipment included:
 1. Base and stand assembly with control box
 2. Pinch tube valve (model 710PT-LF)
 3. Pneumatic Foot Pedal
- Sold Separately:
 1. Model SL101N or DC100 Metered controller with digital timer display sold separately with all models DP50-1, DP200-1 and DP400-1.



Base and stand assembly
(controller and 400ml dispense tool mounted)



Pinch tube valve



SL101N or DC100 Valve controller with digital
display timer

SOLD SEPERATELY

Not included: Material cartridges.

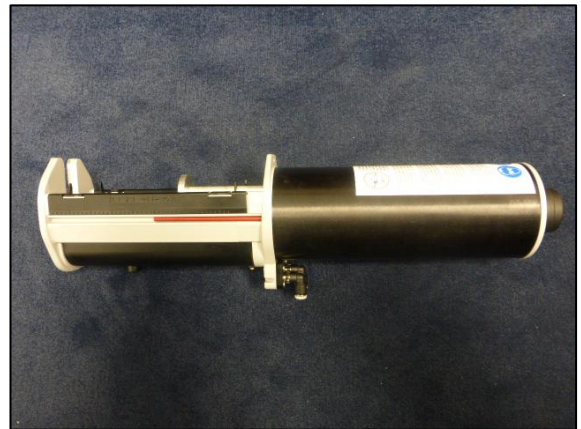
2. 50ml, 200ml or 400ml dual cartridge dispense tool



50ml Dispense Tool

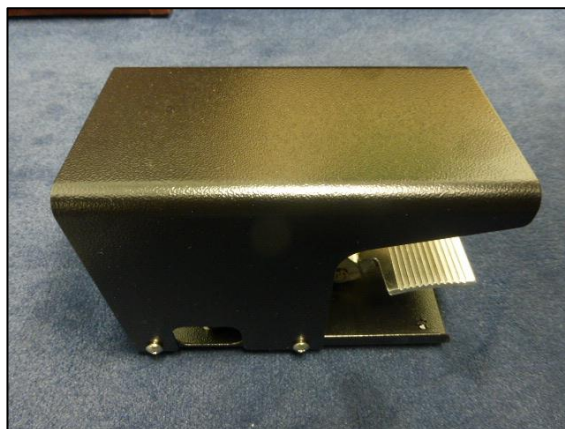


200ml Dispense Tool



400ml Dispense Tool

3. Foot pedal



- Accessories



Controller-to-Compressor Air Line



Controller-to-Dispense Tool Air Line



Controller-to-Foot Pedal Air Line



Plugs

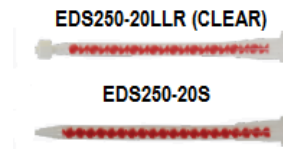
- Consumables



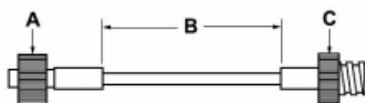
Nozzle Retaining Nut
(p/n: EAUM-10-PP) – x10



Static Mixing Nozzles
(DP200-1 and DP400-1)
(p/n: EA05-32YLL) – x10



Static Mixing Nozzles (DP50-1)



Pinch Tubes
(p/n: 580037A – x10)



Luer-Lock Tip Adapters
(p/n: EA05-00L) – x10



Sample Tips Kit
(p/n: QK-NSK)

Controls

Front view



RETRACT / DISPENSE SWITCH	Sets the dispense tool in retract or dispense mode.
AIR ON / AIR OFF SWITCH	Isolates the unit from the main air supply.
DISPENSE PRESSURE	Displays the set dispense pressure.
DISPENSE ADJUST	Sets the required dispense pressure.

Rear view



INPUT PRESSURE	Displays the set dispense pressure.
INPUT ADJUST	Sets the required input pressure.
MAIN AIR IN	Inlet port for the main air supply
TOOL DISPENSE IN	Outlet port for the dispense tool (dispense mode)
TOOL RETRACT OUT	Outlet port for the dispense tool (retract mode)
FOOT PEDAL IN	Inlet port for the foot pedal (without valve use)
FOOT PEDAL OUT	Outlet port for the foot pedal (without valve use)
VALVE	Outlet port for the valve operating air
FOOT PEDAL IN (VALVE USE)	Inlet port for the foot pedal (with valve use)
FOOT PEDAL OUT (VALVE USE)	Outlet port for the foot pedal (with valve use)

Set-up

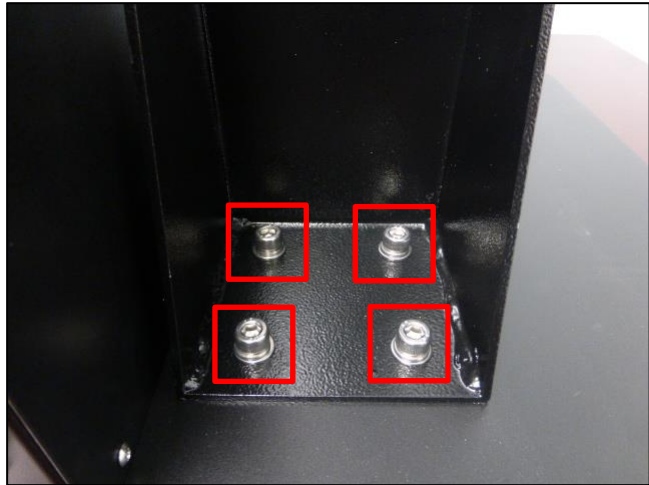
Position Adjustment

Carefully unpack all components and save all packaging materials for later use.

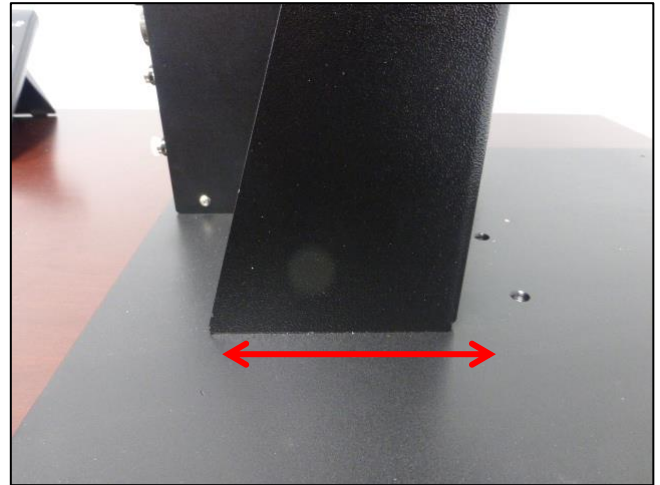
The DCD unit comes pre-assembled with the pneumatic cartridge dispenser already mounted. Set the DCD on a stable surface, designed to handle the weight.



The stand is mounted to the base using the four (4) bolts (shown below) at the rear of the unit. The stand may be positioned fully to the rear, or in the forward mounting holes as shown. Ensure that all bolts are firmly tightened.



Rear View



Left Side View

The pneumatic cartridge dispenser will already be mounted into one of the preassigned holes but can easily be removed to raise or lower the nozzle to better suit your application.



Rear View



Right Side View

Adjust the dispenser angle of the dispense tool to position the tip at the desired position.



Pneumatic Connections

- Dispense Tool Connections

Instructions:

1. Connect the Controller-to-Dispense Tool airline(s) to the Dispense Tool pneumatic ports. Please take note of the Dispense Tool you are using (refer to pictures below).



Controller-to-Dispense Tool Pneumatic Line



50ml Dispense Tool Pneumatic Port



200ml/400ml Dispense Tool Pneumatic Ports



50ml Dispense Tool Pneumatic Port Connected



200ml/400ml Dispense Tool Pneumatic Ports Connected

Note: The 50ml dispense tool has a manual mechanical retract. The connected pneumatic line is for the Dispense signal. It does not have a Retract port.

The 200ml/400ml dispense tool has an automatic pneumatic retract. The port on the right (refer to above picture for reference) is for the Dispense signal. The port on the left is for the Retract signal.

- Foot Pedal Connections

Instructions:

1. Connect the Controller-to-Foot Pedal pneumatic lines to their corresponding ports.



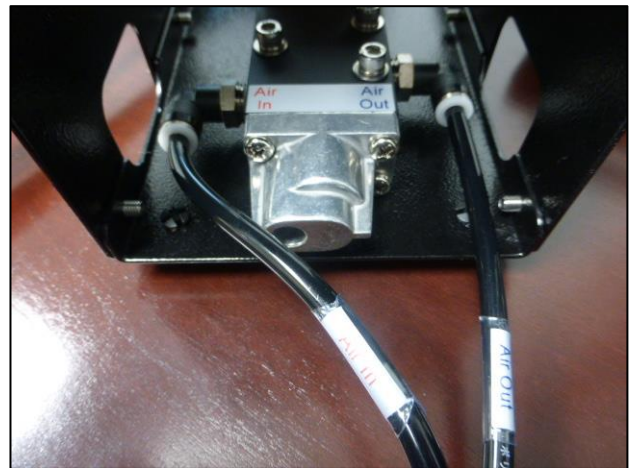
Controller-to-Foot Pedal Pneumatic Lines



Foot Pedal Pneumatic Ports



Hose Labels



Foot Pedal Pneumatic Ports Connected

Note: The hoses are labeled to match the appropriate air connections.

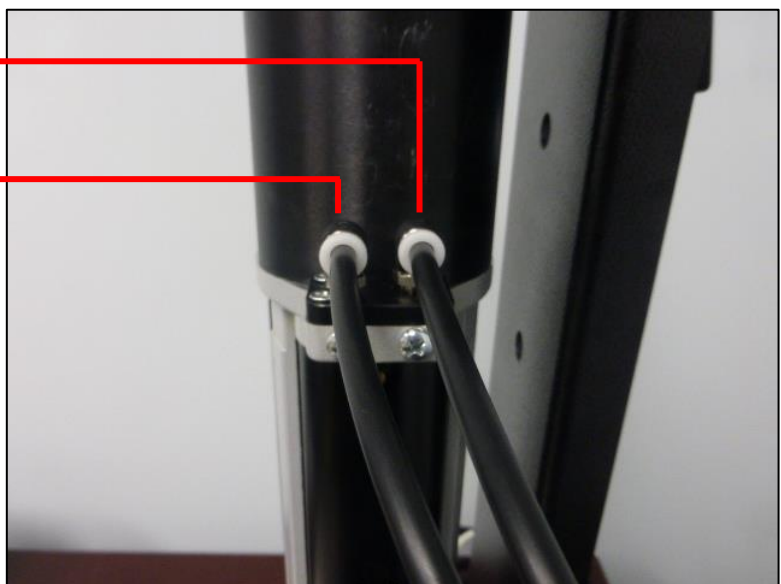
- Control Box Connections

Instructions:

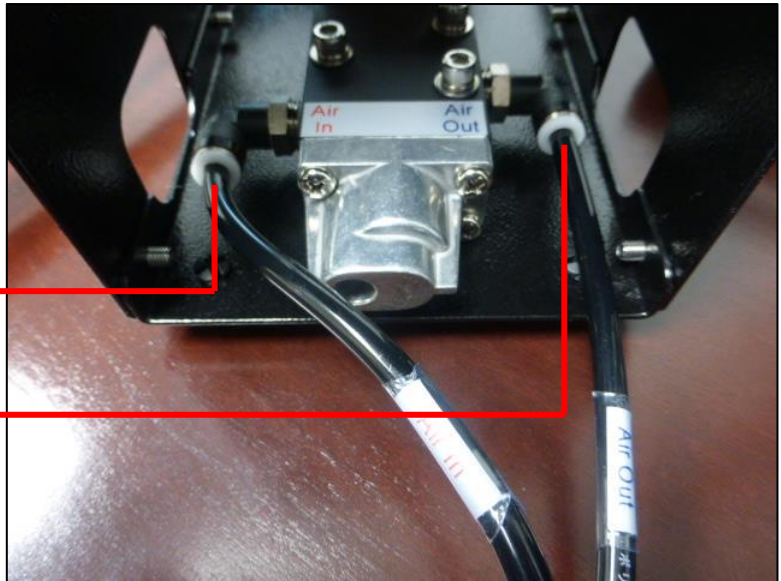
1. Connect the Controller-to-Compressor pneumatic line to the MAIN AIR IN port.



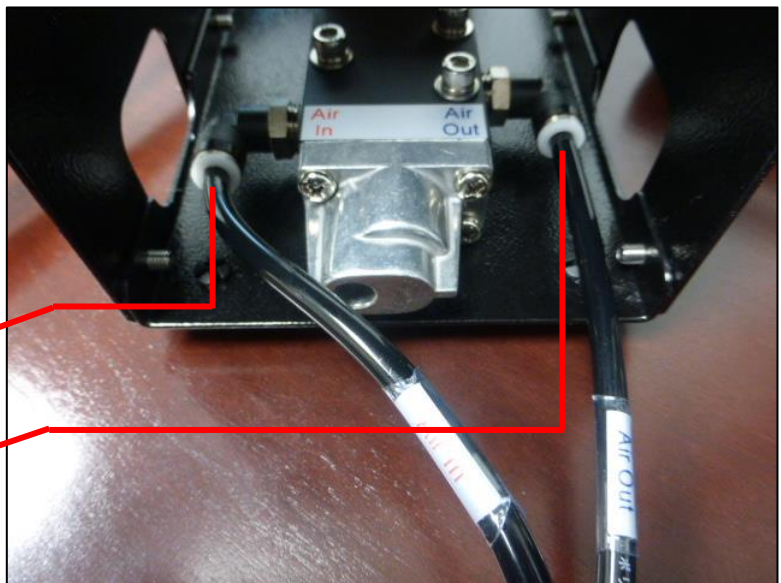
2. Connect the Controller-to-Dispense Tool pneumatic lines to their corresponding ports.



3. Connect the Controller-to-Foot Pedal pneumatic lines to their corresponding ports. Please take note of the difference when using a valve (refer to pictures below).



Without Valve Use

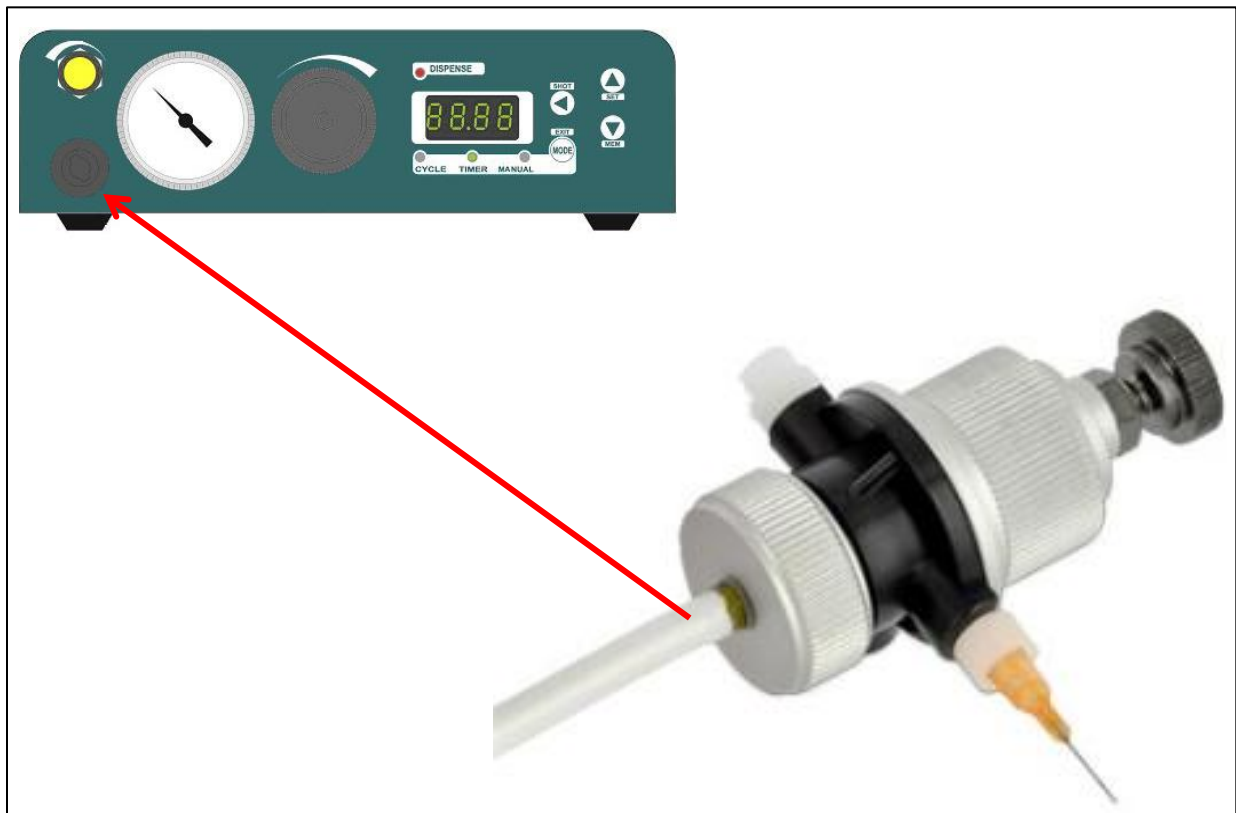


With Valve Use

4. Connect the valve operating pneumatic line (if applicable) to its corresponding port. Please take note of the difference when using the digital timer controller (refer to pictures below).



Without Digital Timer

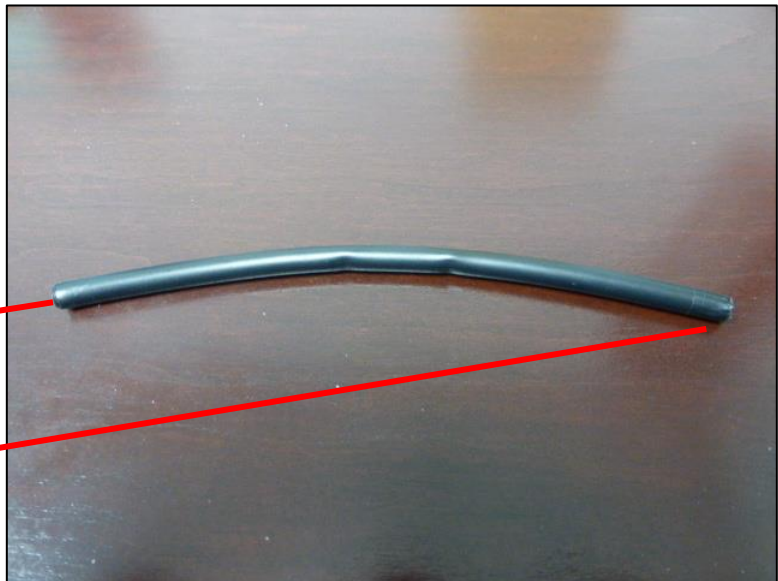


With Digital Timer

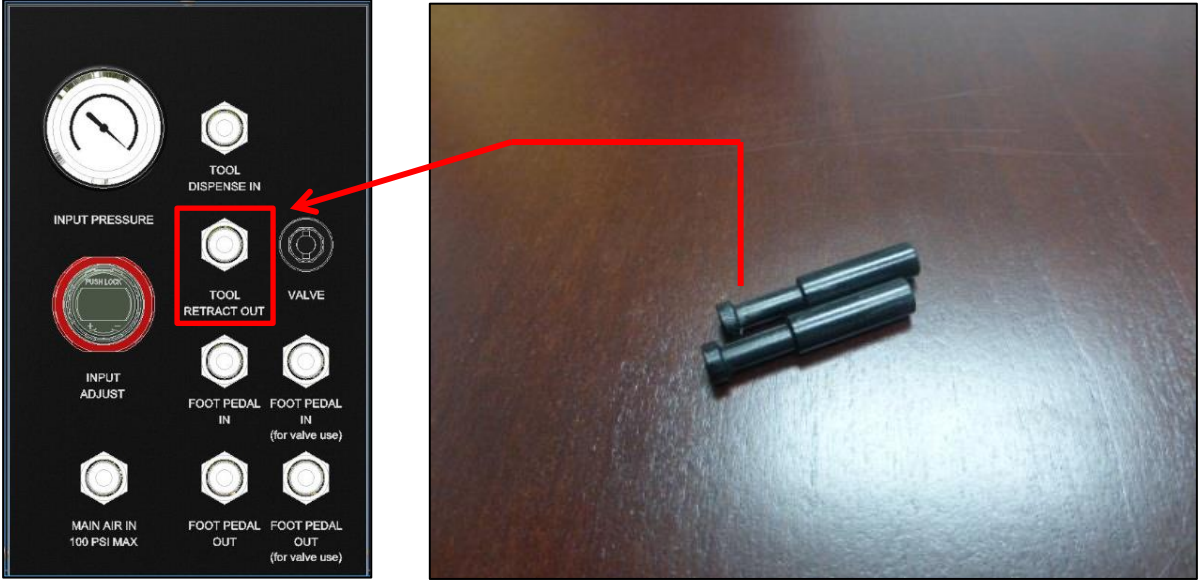
5. Plug or short the remaining unused ports. Please take note of the difference when using a valve and the dispense tool size used (refer to pictures below).



Without Valve Use



With Valve Use

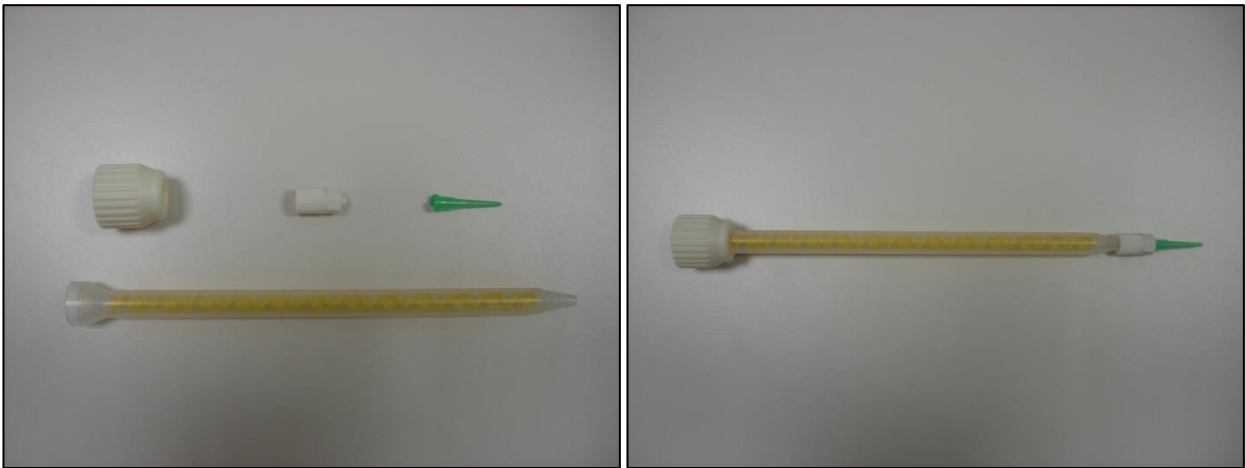


When Using the 50ml Dispense Tool

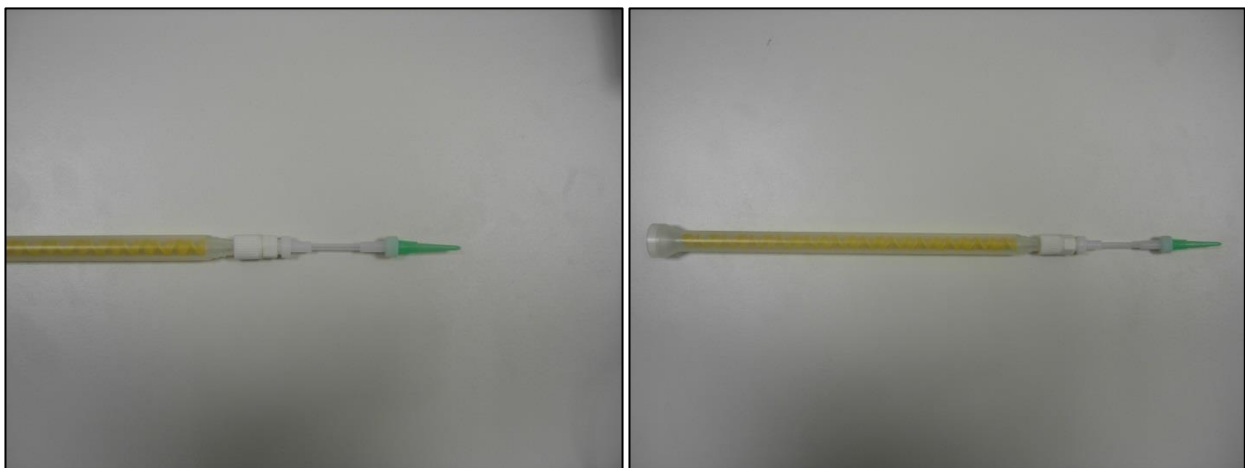
Material Connections

Instructions:

1. Connect the Luer-Lock Tip Adapter to the Static Mixer.
2. Connect the dispense tip directly to the adapter or to the pinch tube. Please take note of the difference when using a valve (refer to pictures below).



Without Valve Use



With Valve Use

Note: The Luer-Lock Tip Adapter self-threads to the stepped outlet of the static mixer.

Material Cartridge Handling

Loading the Material Cartridge



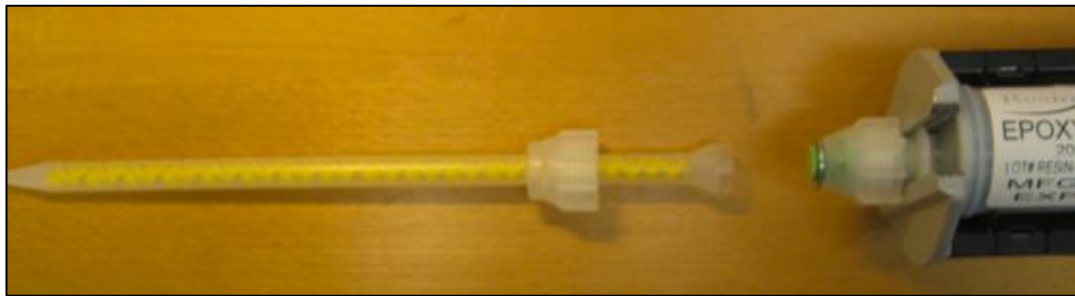
Instructions:

1. Ensure the AIR ON/AIR OFF switch is set to the AIR OFF position, and that the RETRACT/DISPENSE switch is in the RETRACT position.
2. Supply air to the rear of the control box into MAIN AIR IN.
3. Set the AIR ON/AIR OFF switch to the AIR ON position. Set the INPUT PRESSURE to 60psi by turning the INPUT ADJUST knob.

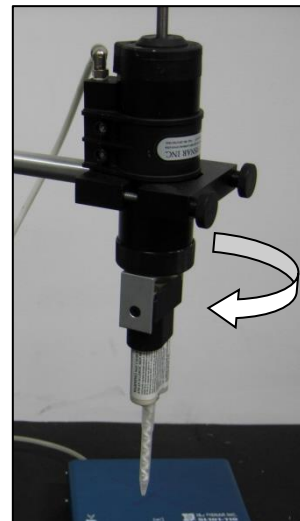
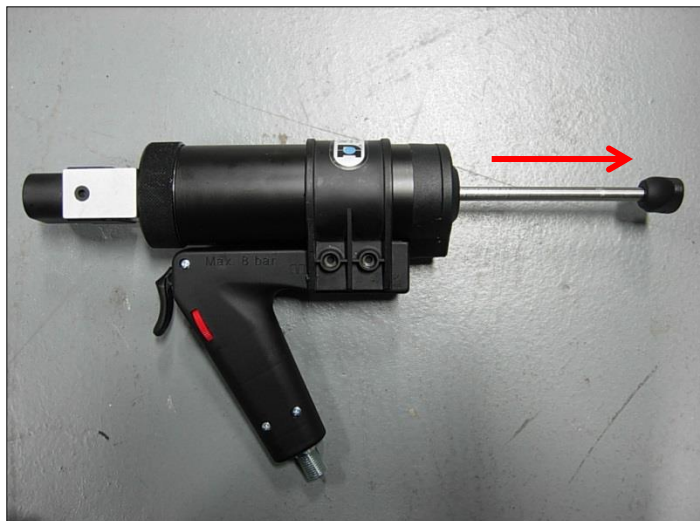
4. Set the DISPENSE PRESSURE to 10psi. If the Control Box is configured for valve use, then the pistons of the dispense tool will retract right away. If not, press the foot pedal to retract the pistons. Increase the DISPENSE PRESSURE by turning the DISPENSE ADJUST KNOB if necessary.

Note: A slight air leak may be heard from the Dispense Tool when it is fully retracted and the RETRACT signal is still ON. This is normal and should not be a cause for alarm.

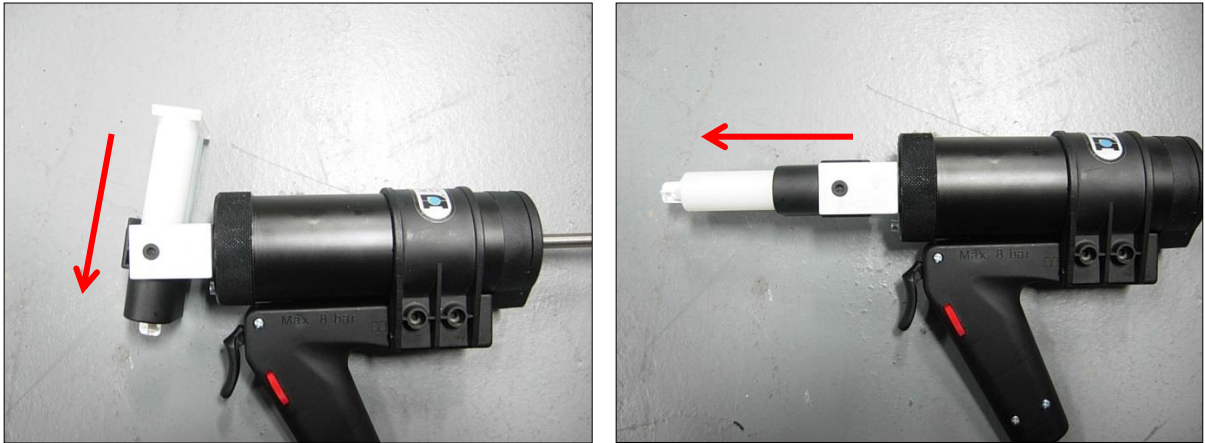
5. Remove any cartridge cap that may be in use, and connect a static mixing nozzle at the outlet.



6. If using the 50ml dispensing tool, pull the plunger to retract the pistons. Twist the holding ring.

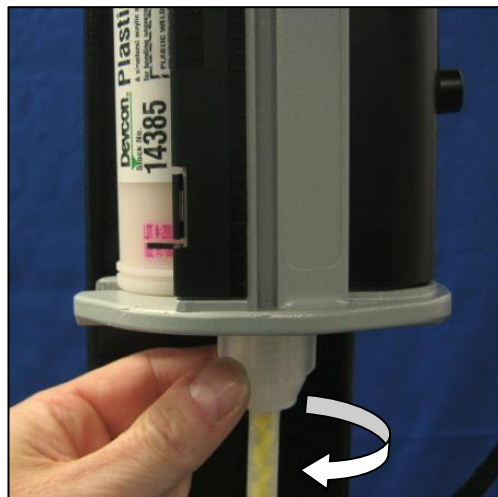


7. Tilt the holder to accept the cartridge.



50ml Dispense Tool

8. If using the 200ml/400ml dispensing tool, slide the material cartridge into the dispensing tool and tighten the mixing nozzle retaining nut. You are now ready to dispense.



200ml/400ml Dispense Tool

Unloading the Material Cartridge

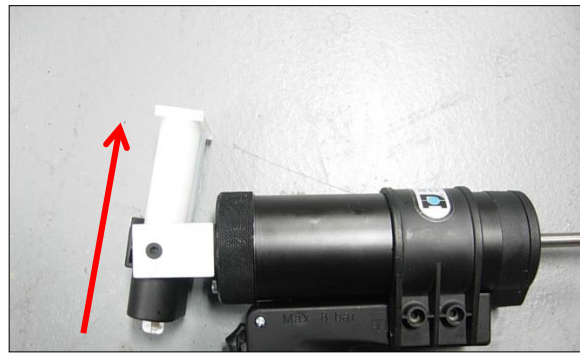
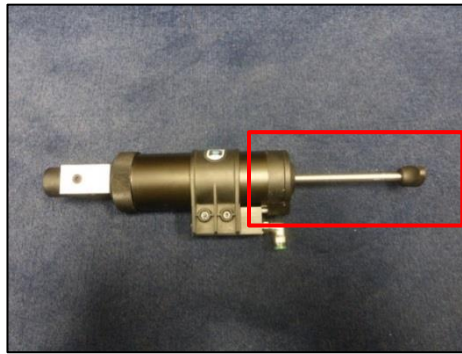
Instructions:

1. Set the RETRACT/DISPENSE switch to RETRACT position.

Note: A slight air leak may be heard from the Dispense Tool when it is fully retracted and the RETRACT signal is still ON. This is normal and should not be a cause for alarm.

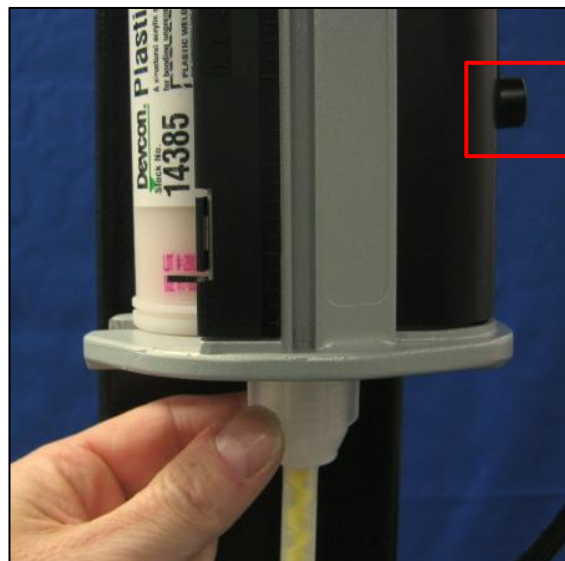


2. If using the 50ml dispensing tool, pull the plunger to retract the pistons. Twist the holding ring and tilt the holder to release the cartridge.



50ml Dispense Tool

3. If using the 200ml/400ml dispensing tool: If the Control Box is configured for valve use, the pistons of the dispense tool will automatically retract. If not, press the foot pedal to retract the pistons. Press the button release to push the cartridge out of the dispense tool.



200ml/400ml Dispense Tool

Operation

Dispensing – No Valve Setup

Instructions:

1. Position the cartridge so that the pistons will enter and not impact the cartridge walls.
2. Move the AIR ON/AIR OFF switch to the AIR ON position.



3. Set the RETRACT/DISPENSE switch to the DISPENSE position.
4. Press the foot pedal and observe the pistons enter the cartridge. The material will proceed into and then exit from the tip of the static mixer.
5. Adjust the DISPENSE ADJUST knob until the DISPENSE PRESSURE dial reads sufficient pressure to dispense at the desired dispense rate.
6. Press the foot pedal to dispense.

Dispensing – Valve Setup

Instructions:

1. Position the cartridge so that the pistons will enter and not impact the cartridge walls.
2. Move the AIR ON/AIR OFF switch to the AIR ON position.



3. Set the RETRACT/DISPENSE switch to the DISPENSE position. The pistons will enter the cartridge right away to start the flow of material. The material will stall at the inlet of the pinch tube valve.
4. Press the foot pedal to open the valve and dispense.
5. Adjust the DISPENSE ADJUST knob until the DISPENSE PRESSURE dial reads sufficient pressure to dispense at the desired dispense rate.
6. Release the foot pedal to close the valve and stop the dispensing.

Technical Information

Specifications

DCD Dispenser Controller (excluding pneumatic cartridge holder)

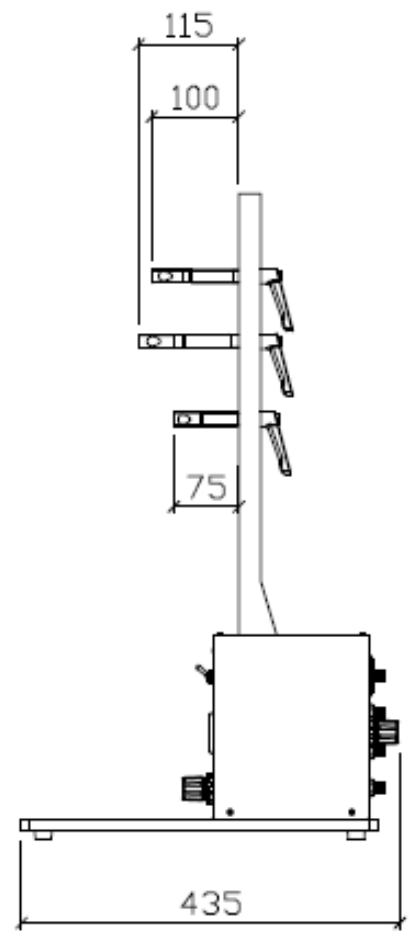
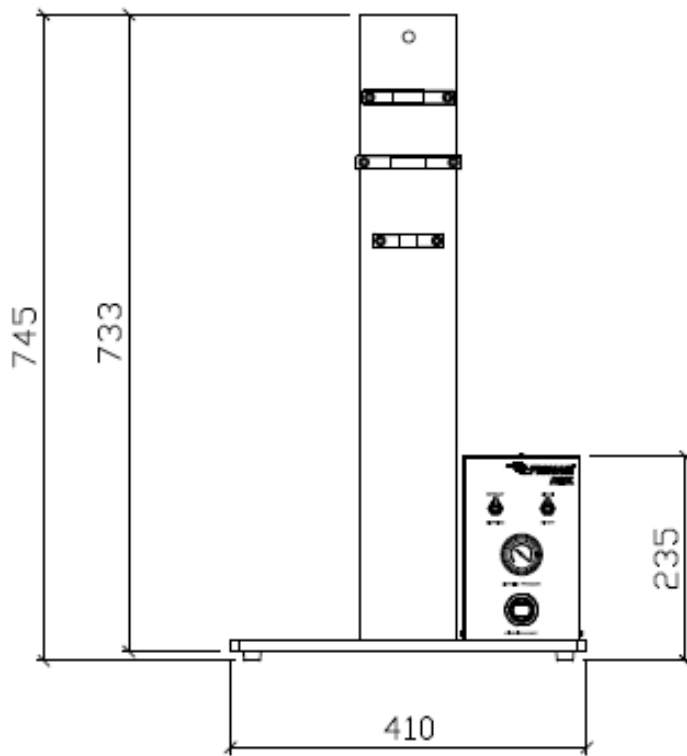
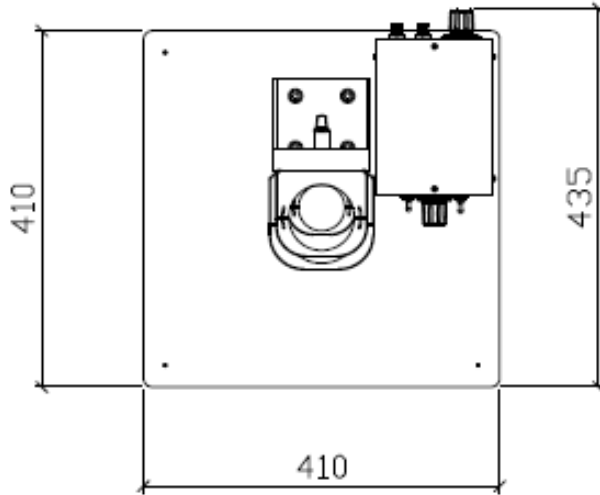
Operating Pressure:	87 psi maximum
Compressed Air Supply:	100 psi maximum
Air requirements:	ISO 8573-1, 2.4.2
Pressure Adjustment:	Variable
Pneumatic Connections:	¼ inch OD
Weight without Foot Pedal:	32 lbs. (14.5 kg)
Foot Pedal Weight:	4 lbs. (1.8 kg)

Pneumatic Dispense Tool

Operating Pressure:	87 psi maximum
Compressed Air Supply:	100 psi maximum
Air requirements:	ISO 8573-1, 2.4.2
Pressure Adjustment:	Infinitely variable
Sound level:	83 dBA
Weight:	
DP50:	2.2 lbs. (1 kg)
DP200:	3.52 lbs. (1.6 kg)
DP400:	4.85 lbs. (2.2 kg)
Codes and Standards Applied:	
Machine Directive:	2006/42/EC
Compressed air quality class:	EN ISO 8473-1:2000
Pneumatic Connections:	¼ inch OD

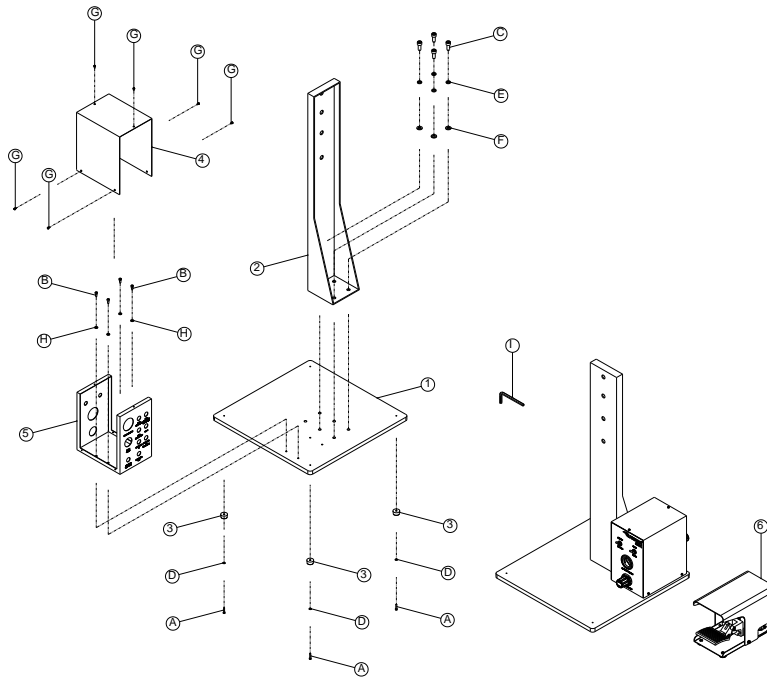
Refer to the original manufacturer Operating Instruction Manual for details.

Dimensions



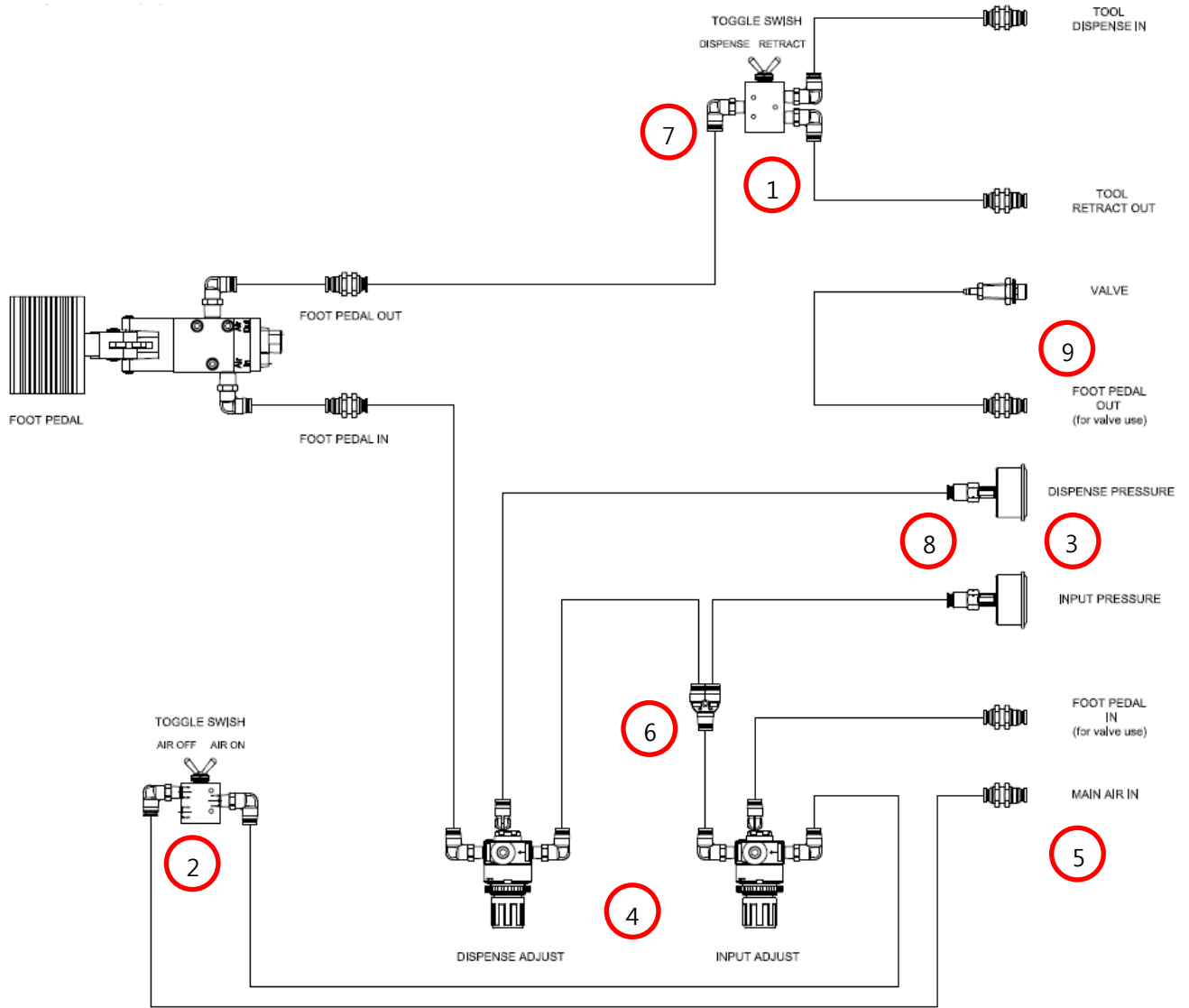
Exploded View and Parts List

- Housing Module



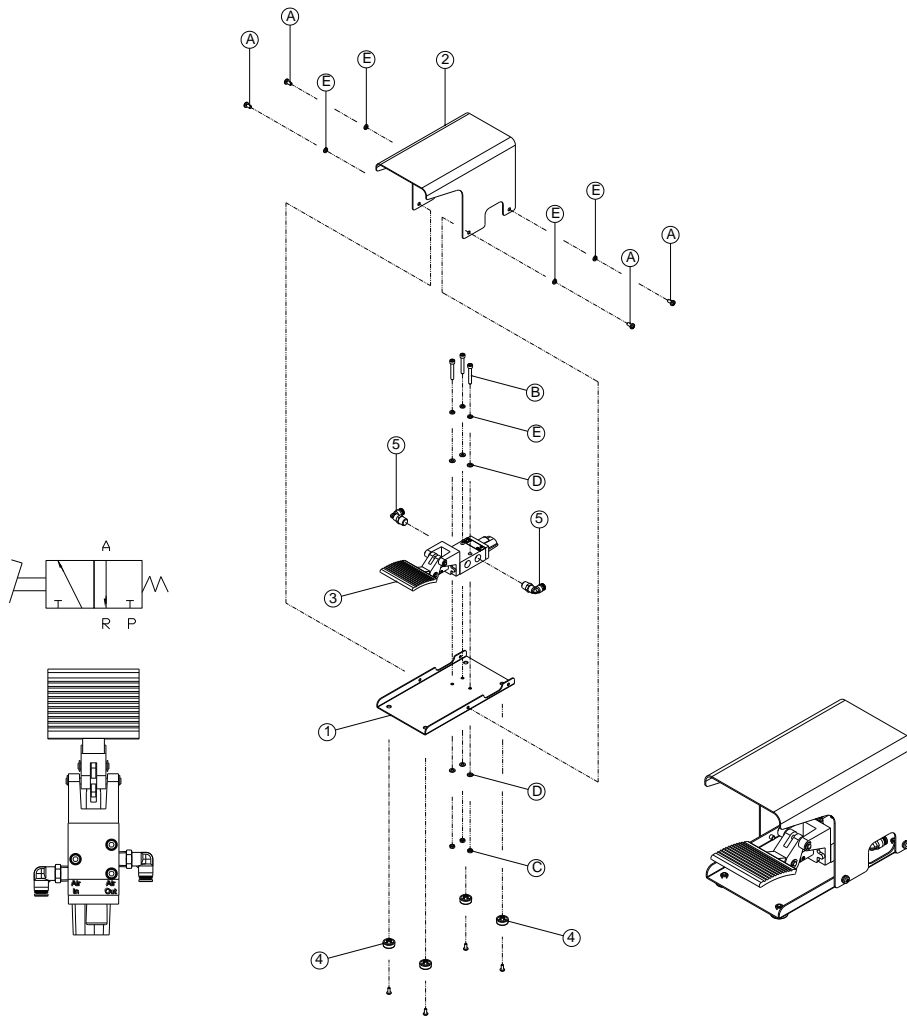
NO.	PART NO.	DESCRIPTION
1	1307-10106001	Main Base
2	1307-10210001	Stand
3	1307-10472001	Cushion
4	1307-10240001	Control Box Upper Cover
5	1307-10240002	Control Box Bottom Cover
6	1307-15400002	Foot Pedal Module
A	W116000012	SUS HEXAGONAL SOCKET BOLT「M3*15L」
B	W116000014	SUS HEXAGONAL SOCKET BOLT「M4*10L」
C	W116000084	SUS HEXAGONAL SOCKET BOLT「M8*20L」
D	W118000002	SUS FLAT WASHER「M3」
E	W118000013	SUS SPRING WASHER「M8」
F	W118000006	SUS FLAT WASHER「M8」
G	W116000026	SUS CROSS BOLT「M3*6L」
H	W118000003	SUS FLAT WASHER「M4」
I	W107000007	ALLOY WRENCH M8-「6mm」

- Pneumatic Circuit Module



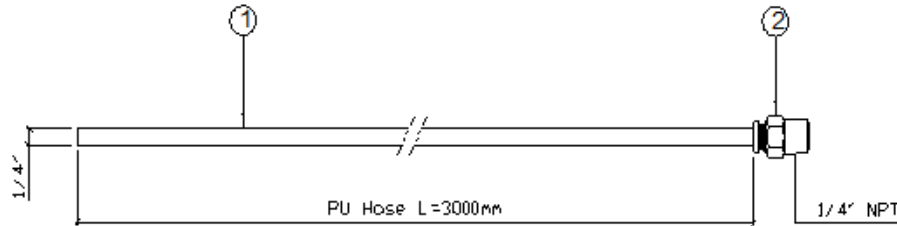
NO.	PART NO.	DESCRIPTION	Quantity
1	1307-10470001	Hand Valve - 41V	1
2	1307-10470003	Hand Valve - 31V	1
3	W124000090	Pressure Gauge	2
4	W124000145	Pressure Regulation Valve	2
5	W124000151	Quick Coupling	7
6	W124000152	Quick Coupling	1
7	W124000153	Quick Coupling	13
8	W124000155	Quick Coupling	2
9	N/A	Valve * (Provided by Fisnar)	1

- Foot Pedal Module



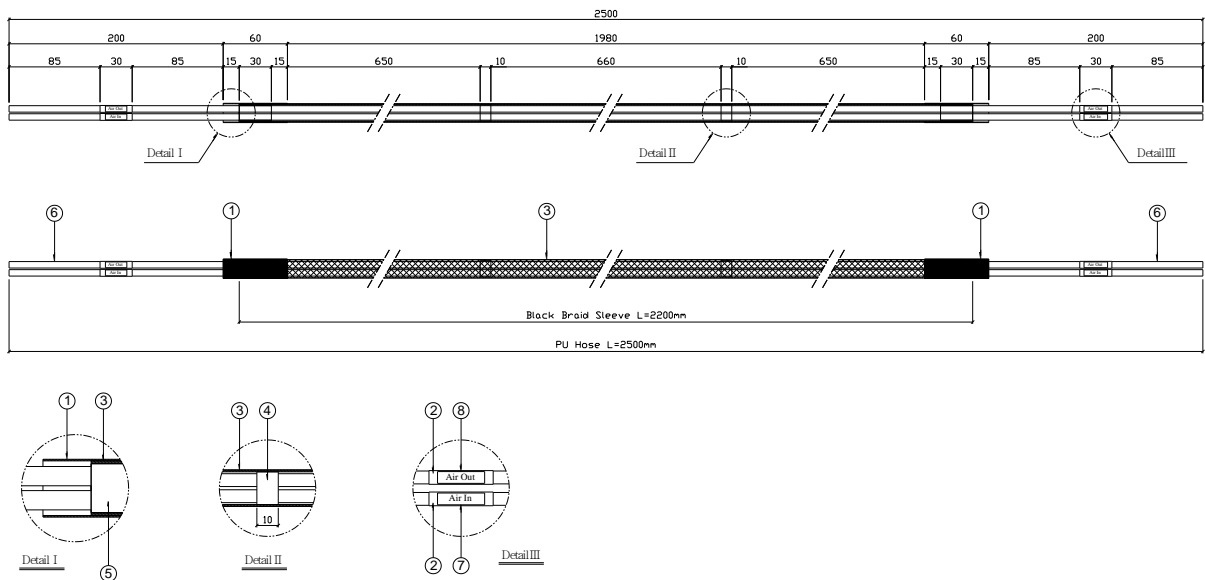
NO.	PART NO.	DESCRIPTION
1	1307-10210002	Pedal Fixing Plate
2	1307-10210003	Cover
3	1307-10470002	Pedal
4	1307-10472002	Cushion
5	W124000154	Quick Coupling
A	W116000028	SUS CROSS BOLT -「M5*10L」
B	W116000073	SUS HEXAGONAL SOCKET BOLT「M5*35L」
C	W117000004	SUS NUT「M5」
D	W118000004	SUS FLAT WASHER「M5」
E	W118000011	SUS SPRING WASHER「M5」

- Air Input Module



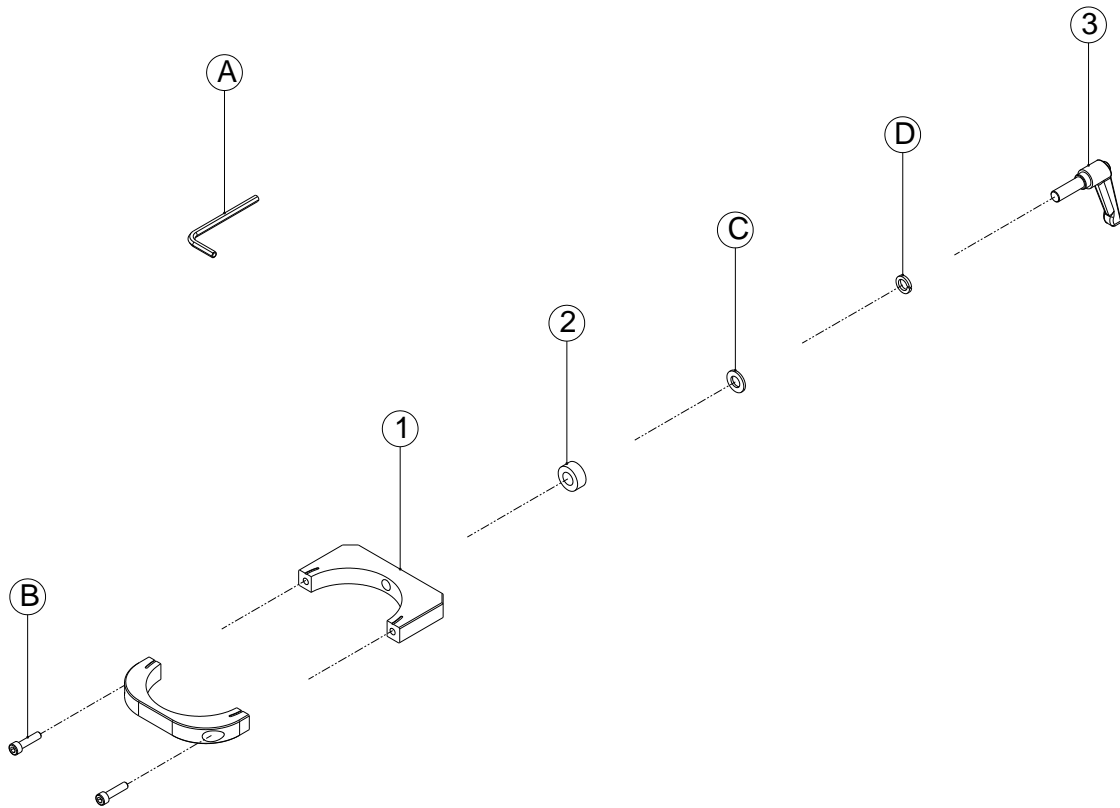
NO.	PART NO.	DESCRIPTION
1	W122000013	PU Hose
2	W124000156	Quick Coupling

- Foot Pedal Hose Module



NO.	PART NO.	DESCRIPTION
1	A22ROT-F32-13-60(BR)	Heat Shrinking Sleeve
2	A22ROT-HS-15TR-30	Flat Heat Shrinking Sleeve
3	A22ROT-R419006-2200	Black Braid Sleeve
4	A22ROT-SCM-04-10(BR)	Heat Shrinking Tube
5	A22ROT-SCM-04-30(BR)	Heat Shrinking Tube
6	W122000013	PU Hose
7	Z000000098	Label
8	Z000000099	Label

- Mounting Collar Module



400mL Mounting Collar Parts List

NO.	PART NO.	DESCRIPTION
1	1307-10102003	90mm Holder
2	1307-10150001	Spacer Ring
3	1307-10400001	Handle
A	W107000006	ALLOY WRENCH M6-「5mm」
B	W116000021	SUS HEXAGONAL SOCKET BOLT「M6*25L」
C	W118000007	SUS FLAT WASHER「M10」
D	W118000001	SUS SPRING WASHER「M10」

NOTES

NOTES

Limited Warranty

Manufacturer warrants this product to the original purchaser for a period of two (2) years from the date of purchase to be free from defects in material and workmanship, but not against damages caused by misuse, negligence, accident, faulty installation, abrasion, corrosion or by not operating in accordance with factory recommendations and instructions.

Manufacturer will repair or replace (at factory's option) free of charge, any component of the equipment thus found to be defective upon prepaid return of the equipment to the factory during the warranty period of the equipment. In no event shall any liability or obligation of Manufacturer arising from this warranty exceed the purchase price of the equipment. This warranty is valid only when 5 micron filtered compressed air is used.

The manufacturer's written liability, as stated herein, cannot be altered or enlarged except by a written statement signed by an officer of the company. In no event shall manufacturer be liable for consequential or incidental damages. A return authorization is required from FISNAR prior to shipping a defective unit to the factory.

Manufacturer reserves the right to make engineering or product modifications without notice.

