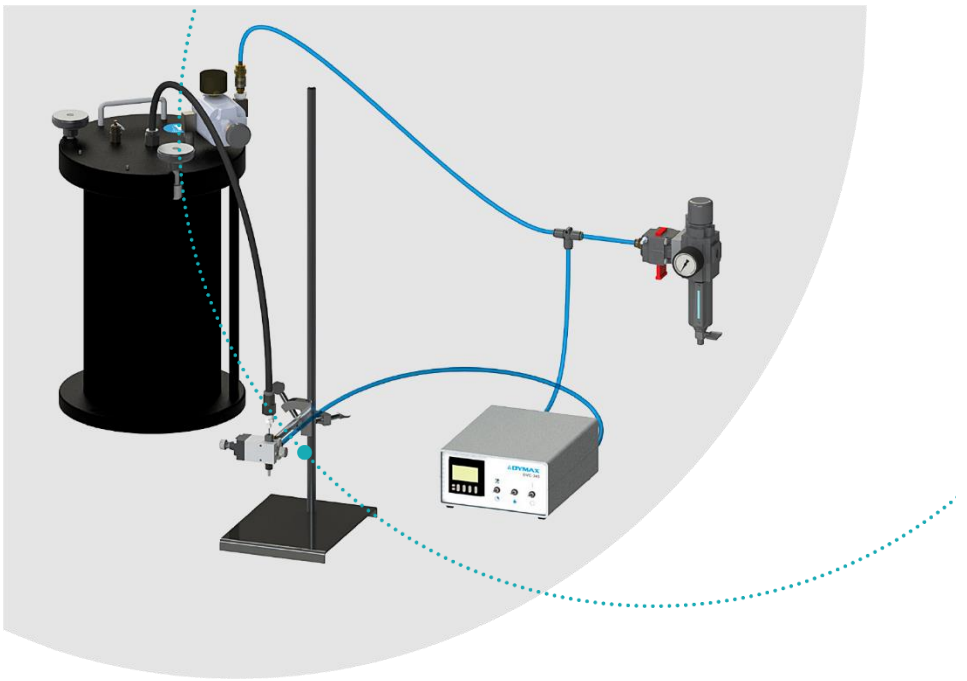




# Model 455 Dispensing Systems

User Guide

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# Safety

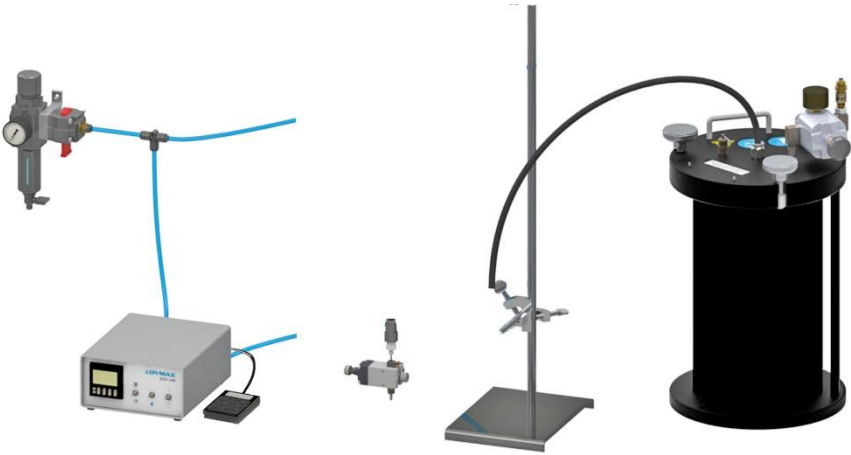
## Using Safe Operating Pressures

Pressurizing the components in the dispensing system beyond the maximum recommended pressure can result in the rupturing of components and serious personal injury. To minimize the risk of rupturing components and injury, do not exceed the maximum operating pressure of the components in your fluid dispensing system.

## Operating Specifications

- Recommended compressed air supply pressure to air filter/regulator = 60 to 90 psi (4.14 to 6.21 bar)
- Recommended pressure setting at air filter/regulator = 75 psi (5.2 bar)
- Maximum pressure setting at air filter/regulator = 100 psi (6.9 bar)
- Power required = 110V power receptacle (customer supplied)

# Configuration Overview



1

## Controls

Dymax valves and digital controller provide precise and consistent actuation.

- Pneumatic function
- Footswitch, manual, or PLC controlled
- Easy to operate
- Manual or timed dispense mode

2

## Dispensing Valve & Accessories

Dymax dispensing valves for handheld and bench-top applications deliver precision solutions for low- to high- viscosity materials. Various style tips and accessories are also available.

3

## Reservoirs

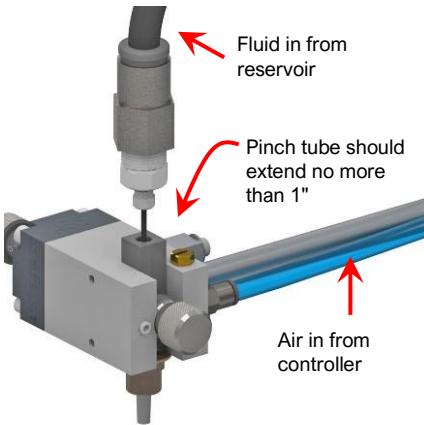
Dymax carries a variety of material reservoirs to accommodate most dispensing applications.

- Range of volumes from 6 oz. cartridges to 10-gallon pressure tanks
- Easy change-over and control

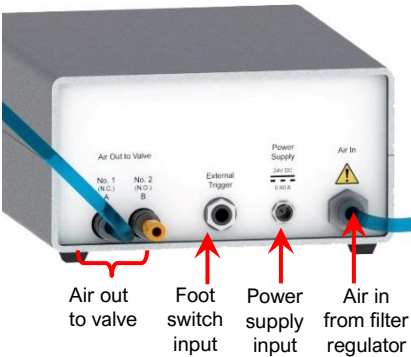
# Key System Connections

*NOTE: Figures 1-4 apply to all systems.*

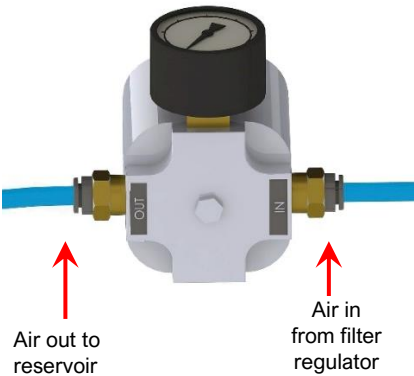
**Figure 1.**  
Valve Air & Material Connections



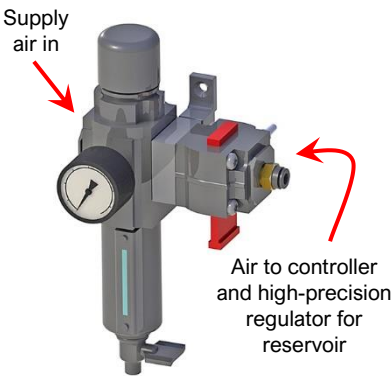
**Figure 2.**  
Controller Connections, Rear Panel



**Figure 3.**  
High-Precision Regulator Connections



**Figure 4.**  
Filter Regulator



# Dispensing Tips

A variety of both needle and taper dispense tips in various lengths, gauges, and shapes are available from Dymax. Tip selection is critical when precision is required and the length, shape, and size of the tip used will define the shape of the fluid deposit and the performance of your dispense system.

The following tips are included with this system and are recommended for use with the Model 485 dispensing valve. Either tip kit can be used depending on the exact viscosity and application.

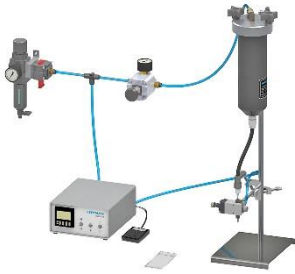
**P3423** Dispensing Tip Kit for Medium- to High-Viscosity Materials (>500 cP)

| Part # | Color | Description       |                                                                                   |
|--------|-------|-------------------|-----------------------------------------------------------------------------------|
| P3169  | Amber | 15 GA Needle Tip  |  |
| P3170  | Green | 18 GA Needle Tip  |  |
| P3232  | Green | 18 GA Tapered Tip |  |
| P3247  | Red   | 25 GA Tapered Tip |  |

Additional kits are available (sold separately) for a range of applications using lower viscosity materials.



# System Configurations



**A**

Systems Using a Cartridge Retainer (p. 8-9)



**B**

Systems Using a Bottle Drop-In Tank (p. 10-12)

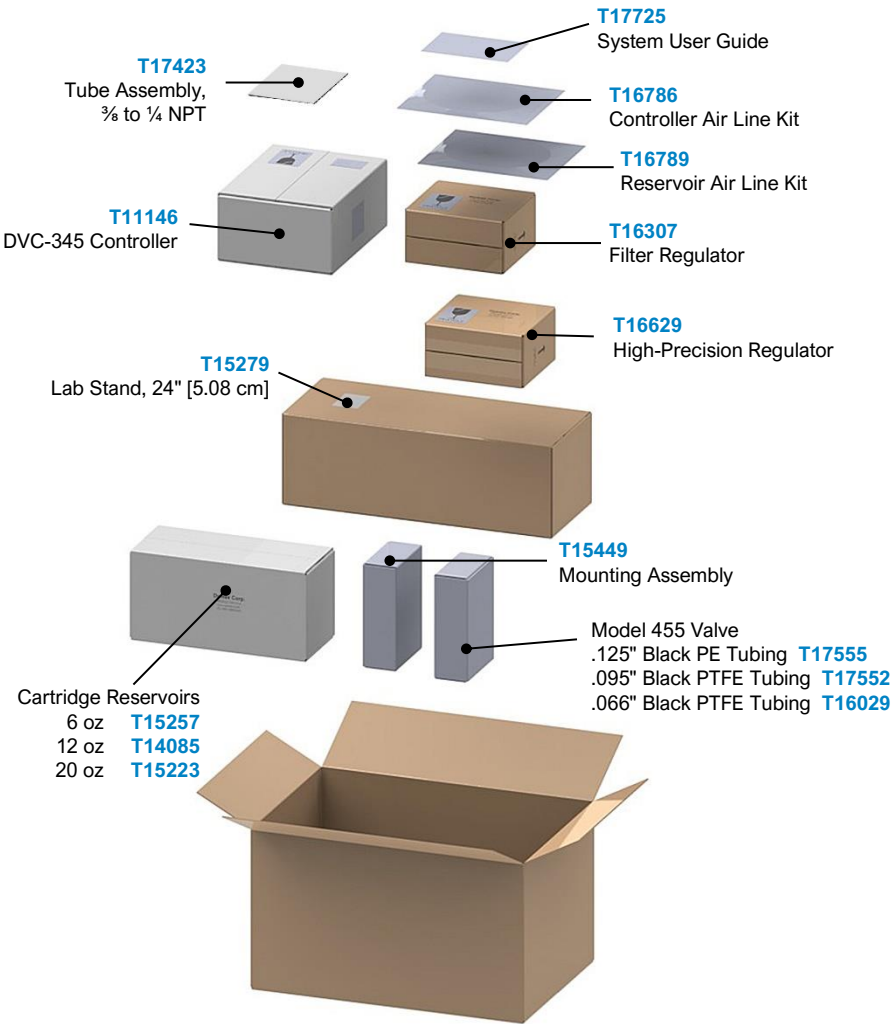


**C**

Systems Using a 10-Gallon Pressure Tank (p. 13-15)

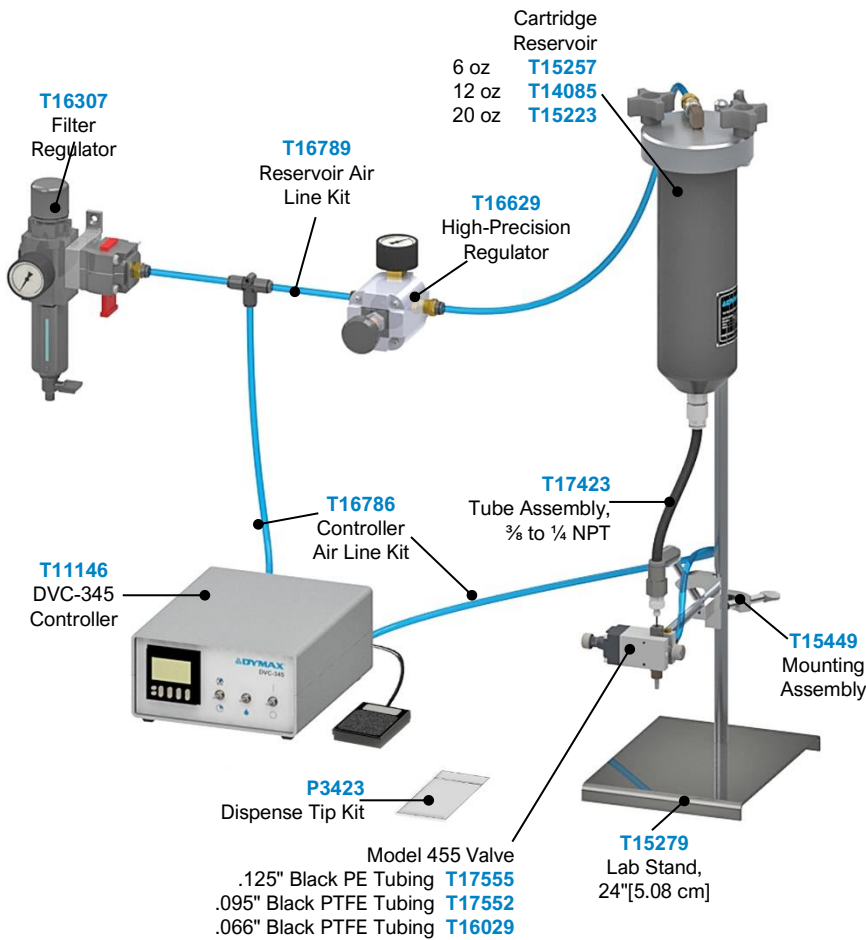
# A - Systems Using a Cartridge Retainer

## Packaged Components





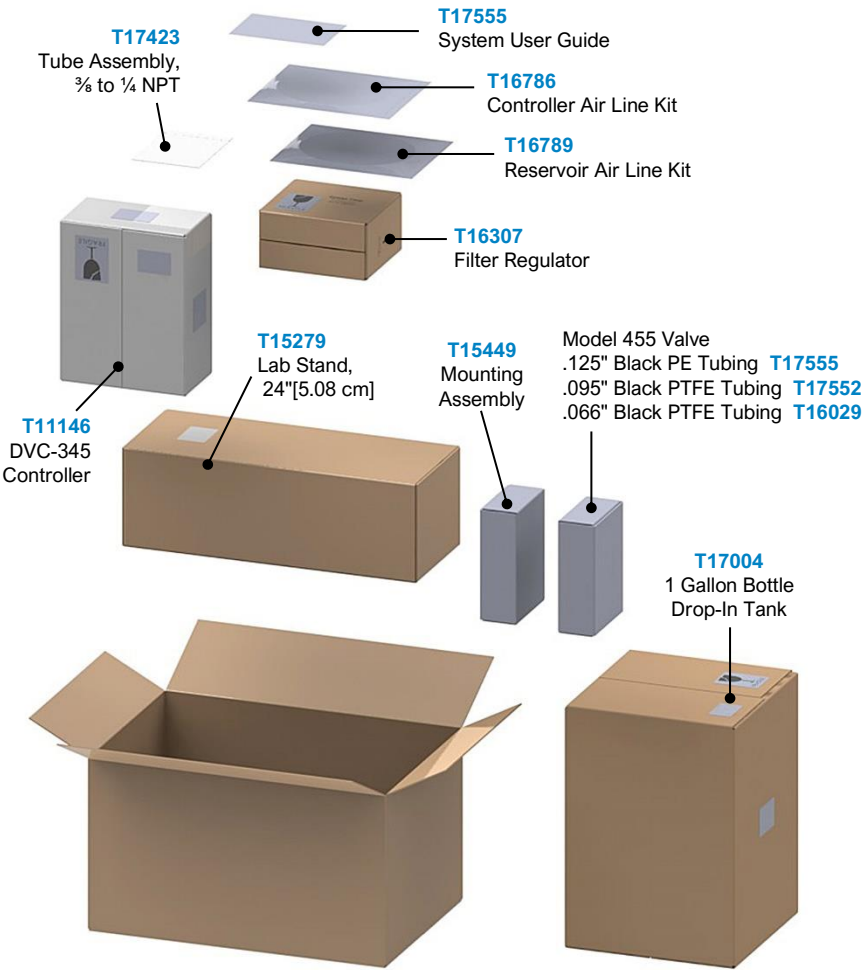
Assembled System



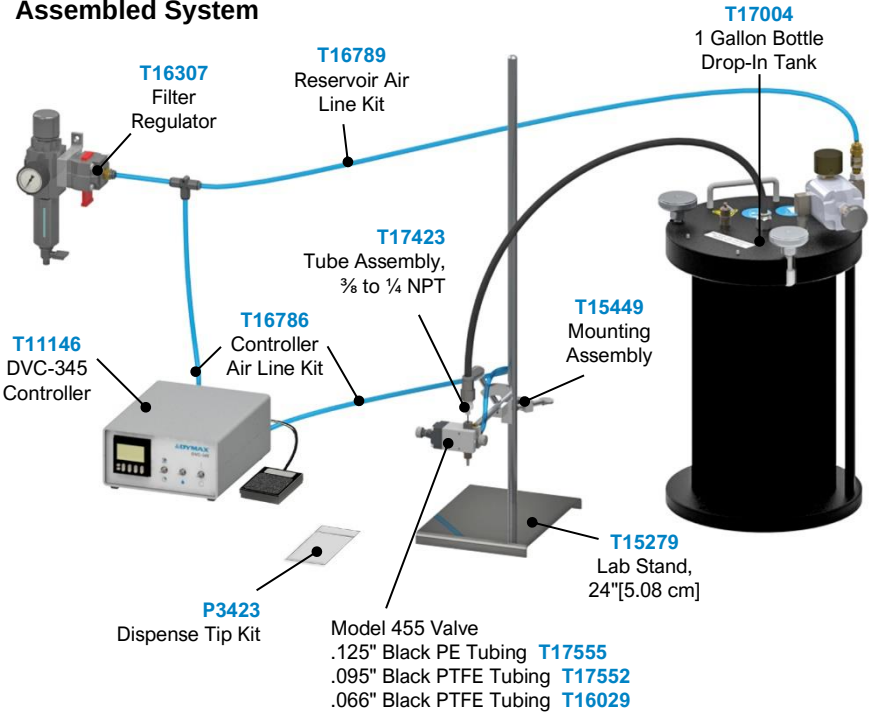
| User Supplied Items                                                 | Spare Parts                                |
|---------------------------------------------------------------------|--------------------------------------------|
| 60-90 psi air supply, 1/4 NPT male fitting<br>110V power receptacle | 1/4" male to 1/4" quick-disconnect fitting |

# B - Systems Using a Bottle Drop-In Tank

## Packaged Components

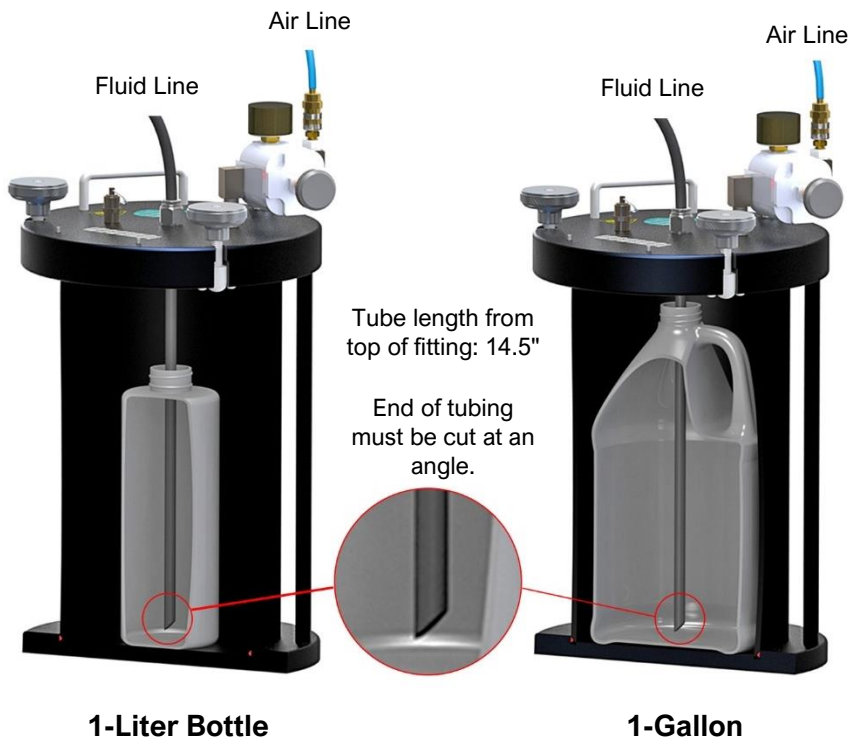


# Assembled System



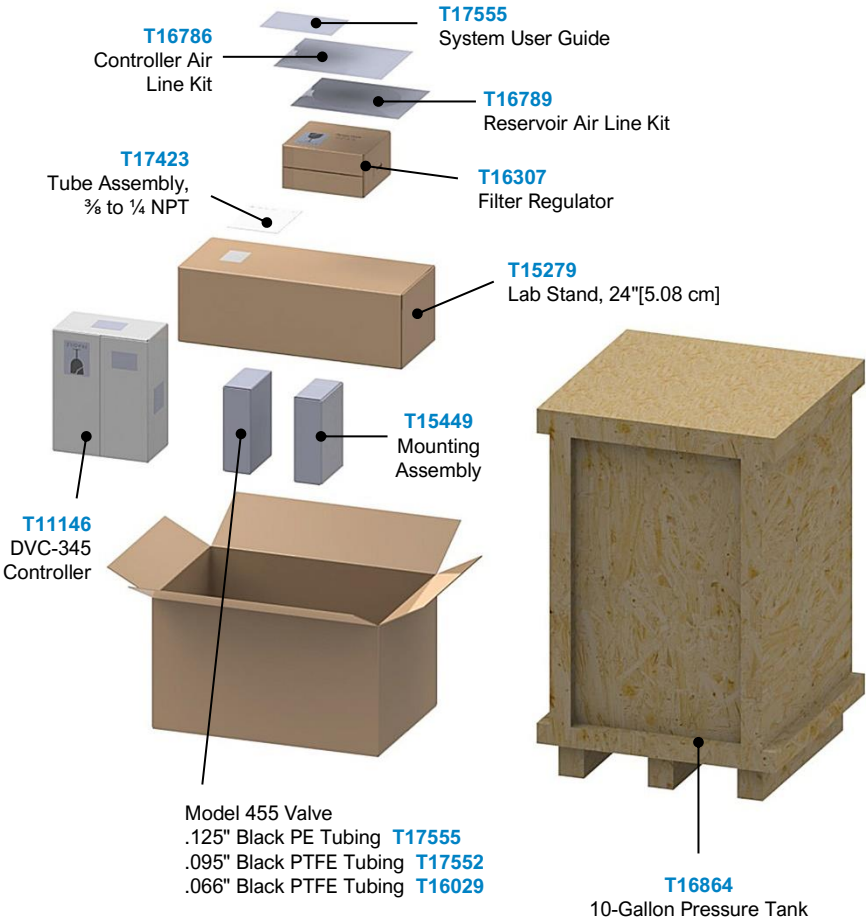
| User Supplied Items                        | Spare Parts                                |
|--------------------------------------------|--------------------------------------------|
| 60-90 psi air supply, 1/4 NPT male fitting | 1/4" male to 1/4" quick-disconnect fitting |
| 110V power receptacle                      |                                            |

# Installing the Fluid Line to the Reservoir

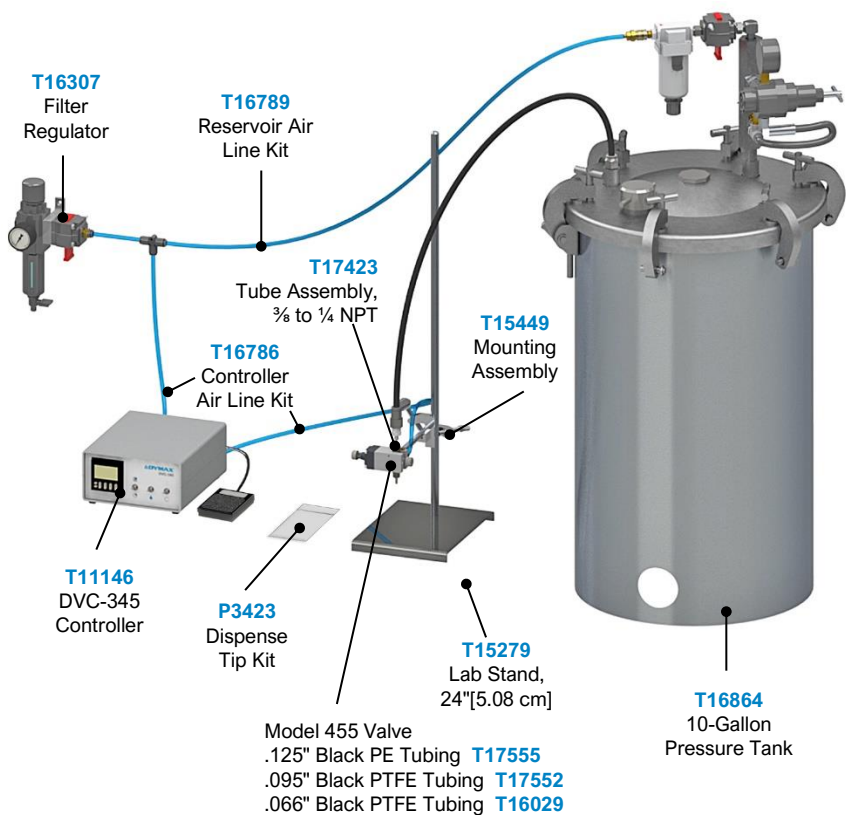


## C - Systems Using a 10-Gallon Pressure Tank

### Packaged Components

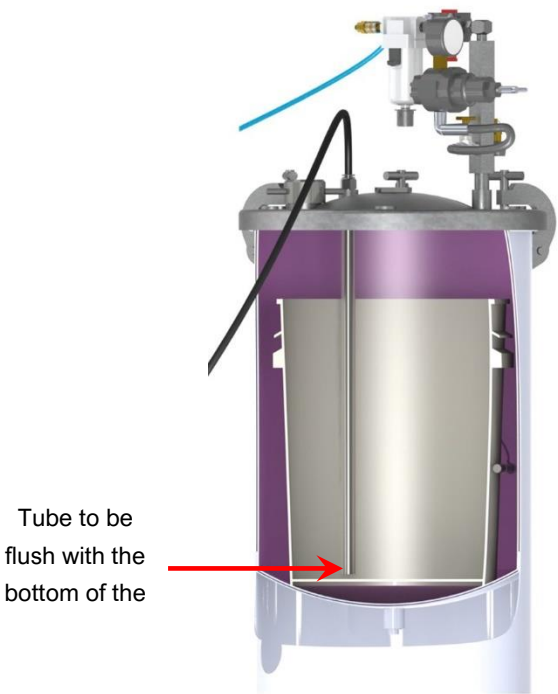


Assembled System



| User Supplied Items                                               | Spare Parts                            |
|-------------------------------------------------------------------|----------------------------------------|
| 60-90 psi air supply, ¼ NPT male fitting<br>110V power receptacle | ¼" male to ¼" quick-disconnect fitting |

# Installing the Fluid Line to the Reservoir



**15-Liter Pail**

