

Follow this procedure every time you have a CA application. Not all steps are required for some CA's.

### **Air Source**

Plant air can be contaminated with moisture, particularly problematic in hot, humid climates. The inlet air to the TS5622VU/TS5622VT valve needs to be clean and dry. Sometimes a coalescing filter is required. This coalescing filter removes remaining moisture from the air supply. Note: The standard 5-micron filter regulator is supplied with the TS500R. If available, nitrogen gas is an excellent pressure source for system operation. Nitrogen is an inert gas and will not introduce moisture contaminants into the Cyanoacrylate. **If nitrogen is used, specify non-bleed regulators on all Techcon reservoir regulator assemblies**

### **Cyanoacrylate Reservoir**

2-liter and 5-liter Pressure tanks can be used to supply Cyanoacrylate to the TS5622VU/TS5622VT valve. Feed lines should be kept as short as possible so as not to restrict flow to the valve.

### **Feed tubing**

Polyethylene tubing is supplied but sometimes Teflon tubing is required.

### **Input Fitting Selection**

Improper fittings lead to valve clogging and system failure. Techcon Systems will only supply polypropylene fittings for Cyanoacrylate. Do not use nylon or metal fittings. Nylon fittings absorb moisture, causing Cyanoacrylate to cure. Metal fittings also react with the adhesive.

### **Tip Adapter**

Use only polypropylene tip adapters when dispensing cyanoacrylates.

### **How to handle the valve system during short breaks, shift changes, overnight, over weekends, or longer breaks**

For short periods of downtime, 24 hours or less, the system may be left idle without any special preparation. Leave the dispensing tip on the TS5622VU/TS5622VT valve. Cyanoacrylate may cure at the end of the tip, forming a natural seal against moisture. Before start-up the next day, install a new tip and resume dispensing. *Important:* Leaving the tip in place reduces the risk of introducing humid air inside the tip cap to the tip adapter. If curing starts in the tip cap and migrates up to the tip adapter and outlet orifice, the operator is now faced with additional maintenance instead of simply changing a tip. The tip adapter would need removal; the outlet orifice cleaned, and in some cases, the system purged. It is not necessary to open or drain the TS5622VU/TS5622VT valve system at the end of a typical workday. Opening the system may introduce moisture from the atmosphere. For periods 24 hours or longer, remove the adhesive from the reservoir and follow the acetone purge procedure to clear the lines, valve and fittings of adhesive and moisture. Immediately cap the valve outlet with a tip cap to seal out moisture.

### **Equipment setup**

1. It is recommended that the system be purged with clean 100% acetone before introducing Cyanoacrylate. This process helps to purge moisture and contaminants from the system. Place a bottle of acetone directly inside the tank, insert the dip tube into the acetone, install the reservoir cover while directing the dip tube inside the bottle and tighten securely.
2. Adjust the reservoir pressure regulator to 5.0 psi (0.34 bar). Check for leaks at the tubing connections. If a leak is detected, immediately release pressure.
3. Place a container under the valve outlet to collect the acetone.
4. Put the controller power switch to "ON". Press and hold the foot pedal to open the valve. Allow acetone to flow through the valve until all acetone has been dispensed from the reservoir, fluid lines and valve.
5. Release pressure tank pressure to relieve all pressure from the tank. Open the cover and remove the liner.
6. Place the bottle of Cyanoacrylate directly into the reservoir. Install cover while directing the tube inside the bottle. Tighten cover securely and reapply pressure.
7. Place a catch cup under the valve outlet. Press and hold purge button until lines are full of adhesive and free of air bubbles. Reservoir pressure may need to be increased; adjust to desired flow rate.
8. The system is now primed and ready for final setup.