



## Chemical Injection Pump & Instrument Air Compressor

### Installation of Fluid Ends

Depending on the fluid end you have installed, the number of threads showing between the fluid end body and brass lock nut, indicating how far the fluid end is screwed onto the yoke and pump, may vary. Please refer to the graphic below and install fluid ends appropriately. Do not follow instructions in the attached manual for 6-7 threads unless you have an original yoke.

**Original Yoke  
Set with 6-7 Threads**



**Original Yoke with Spacer  
Set with 1-2 threads**



**New Yoke  
Set with 1-2 Threads**



For more information on how to install fluid ends, please visit [www.lcotechnologies.com/resources.html](http://www.lcotechnologies.com/resources.html) and watch the YouTube Video called “**Video Tutorial Manual Fluid End Check**” or call LCO directly.



### AI3+ Soft Stop Feature

LCO Technologies has integrated a soft stop feature into the controller and the software (desktop/mobile app) that allows users to stop a pump or a compressor, without powering down the controller. This eliminates issues with SCADA alarms and keeps communications open even if the unit is stopped. As a reminder, the power cannot be cut directly to the three phase motor wires as that will lead to controller fault. Therefore, with this soft stop feature, the pump or compressor can be stopped with a simple button or switch wired to AI3+ while leaving the controller energized to keep communication lines open. This also helps users comply with the code requirement for rotating electrical equipment in hazardous areas, which states that operators must have a means of stopping the device within arms reach of the equipment.

Please note that this soft stop feature does not provide positive energy isolation and it should not be used for emergency shutdown. This feature provides on/off switch functionality, and it should be wired in fail-safe mode.



## Installation Instructions

- Wire 24V straight to AI3+
  - Power can come from the main power supply
  - Wire the positive end to AI3+, and the negative end to “GND” in the Analogue I/O terminal block (any GND will be sufficient as they are a common ground)
- Install a stop button or an on/off switch to AI3+ and ensure the switch is within arms reach of the pump or compressor
  - Install switch as per local electrical code requirements and ensure it is rated for hazardous area
- Ensure 24V is at AI3+ so when energized, the unit will run
  - When the provided power is 0V, the unit will stop (fail safe wiring and operation)
- Connect to the LCO Technologies Software on your desktop computer or mobile app
  - Log in as “Technician”
  - Password “Automatic”
  - Go to the “system setup” tab
  - Enable the function titled “motor soft stop on AI3+” by selecting “enable” from the drop-down menu
- Check that function is working. The unit should stop at 0V on AI3+ and run when energized at 24V.

For any questions or troubleshooting, please contact LCO Technologies directly.

Phone: 403-860-9899

Email: [Info@lcoTechnologies.com](mailto:Info@lcoTechnologies.com)