GOLD

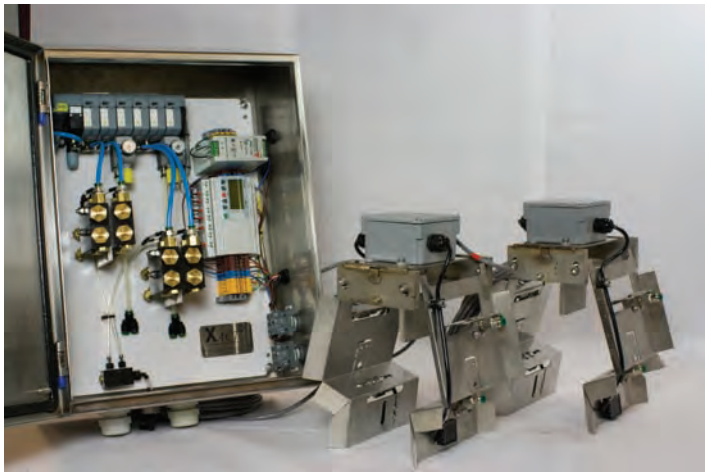
Solutions Limited

OTL SYSTEM INSTALLATION GUIDE: Dual Beam Application

INSTALLATION INSTRUCTIONS

Included Components (Dual OTL):(1)

Control cabinet w/ Remote reservoir



(3) Sensing and delivery assemblies with beam mounting brackets

(18) Boxes of Nylon tubing

(1) 100' 6-wire logic connection wire: Prewired

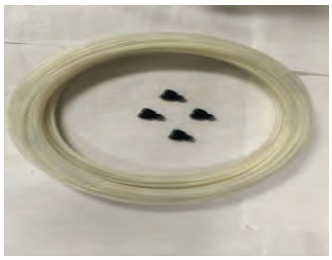
(9) Tee fittings for nozzle air

1. Control Cabinet

2. Remote reservoir

3. OTL Satellite

4. Mounting tab



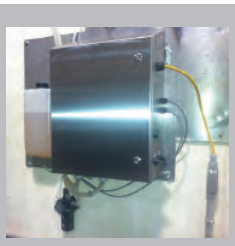
5. Tubing and push connect tee fittings

6. Sensor cable (pre-wired)

**While installing your OTL System, please refer to this page when needed or recommended.*

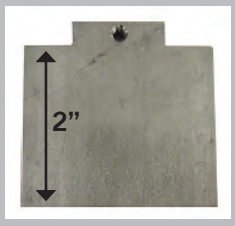
QUICK INSTALL GUIDE:

1. Install Control Cabinet on wall at chest height near overhead chains
2. Re-instal back panel (re-connect tubing from reservoir to control cabinet if tube was disconnected during removal). See photo 1, 2.
3. Test fit sensing and delivery satellite assembly on beam (Perform test fit with all satellites.) See Photo 4.
4. Remove beam mounting tabs from Satellite(s) as shown in diagram. Cut to size (roughly 2" from top).
5. Weld Satellite mounting tab(s) to beam(s).
6. Install sensing and delivery satellite to mounting tab.
7. Mount pre-installed grey logic cable and check all connections as they may have dislodged in transit. See Photo 6. *Logic cable(s) are pre-wired for ease of installation purposes. Please make sure this cable and all other tubing/cable are mounted away from any moving machinery or hazard areas*
8. Run/mount tubing for fluid/air communication. Refer to Photo 6 and tubing reference guide on page 3.
9. Connect power (110V) and air (60-80PSI) to the OTL Control cabinet. Terminals (Line -fused, neutral, ground) are provided for this connection. Installing included air filter is recommended.
10. Prime System - See prime cycle - Page 4
11. Set pumps to correct volume output. See Pnuematic_Modular_Pump_Adjustment sheet.



Once you have completed installation instructions 1 through 3 your unit should look similar to the photo at left.

Typical I-beam installations require the beam mounting tab be 2" in height. Please use this as a reference ONLY and enure the satellite unit aligns with the chain before final welding.

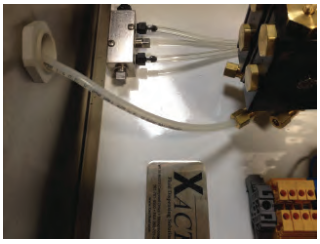


The satellite sensing and delivery units straddle the beam and the "wing" portions hang down on each side of the chain. Note the laser eye pair mounting and be sure the eyes will detect the chain when permanently mounted. The beam mounting tabs are attached prior to shipping. Remove the brackets using an Allen tool and procced with instructions 5 through 8.

Satellite Wing Adjustment

Located between the satellite wings are 2 adjustment bolts. To adjust wing angles, loosen locking nut and tighten or loosen adjustment bolt(s). Tightening bolt will adjust the winges toward the chain. Loosening the bolt will adjust the wing away from the chain. After adjusting, the satellite wing should not make contact with any part of the chain.

TUBING REFERENCE GUIDE



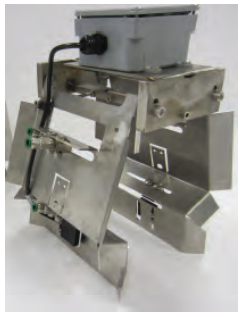
Air Output Tubing

The pumps are fitted with push-to-connect tubing fittings on the outlets. Simply push the tubing into the fitting until firmly seated.

Air Regulator with "Y" Fitting

The solenoid valve stack within the Control Cabinet has three integrated air regulators, one for each satellite. "Y" output connections are pre-installed from each of the air regulators. Cut two runs of tubing to desired length, insert tubing through the white bulkhead fitting in bottom of enclosure, then attach to solenoid valve air regulator "Y" fitting.

Nozzles are pre-mounted to the satellite "wings" as an upper and lower pair. The nozzle has push-to-connect fittings and check valves to ensure ease of installation and positive pressure with no dripping.



Nozzle

The oil inlet is in-line with the nozzle tip and the air inlet is perpendicular to the nozzle tip. (See Left)

Once tubing is run to the satellite units and connected to air regulator, split each air line using the provided Air Tees (see right). These split air lines are for the upper nozzle and lower nozzle air input (see nozzle image). Follow this direction for each satellite unit.

Air Tees

All oil lines attach to the nozzles as suggested in pump diagram (see sidebar).

Connect oil line from reservoir to barb fitting located on bototm side of control cabinet.

Once all tubing connections are secure, add oil to the reservoir.

PUMP ADJUSTMENT

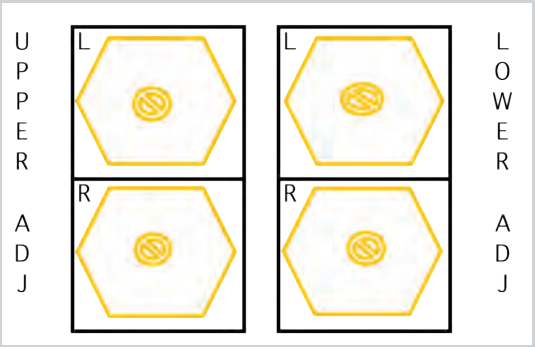
- Pumps are shipped at full stroke (.012cu. in.)
- Pumps are mechanically adjustable via adjustment cap
- Adjust with flat blade screwdriver
- To reduce volume, turn the adjustment stem clockwise
- Each turn reduces the volume by 1/6 (.002 cu. in.)
- Pumps can be reduced to zero volume (OFF)
- Recommended standard volume is .003 cu. in.

To adjust to this setting:

1) Turn pumps "OFF" (6 plus full turns clockwise)
2) Increase pump volume (counterclockwise) 1 1/2 rotations

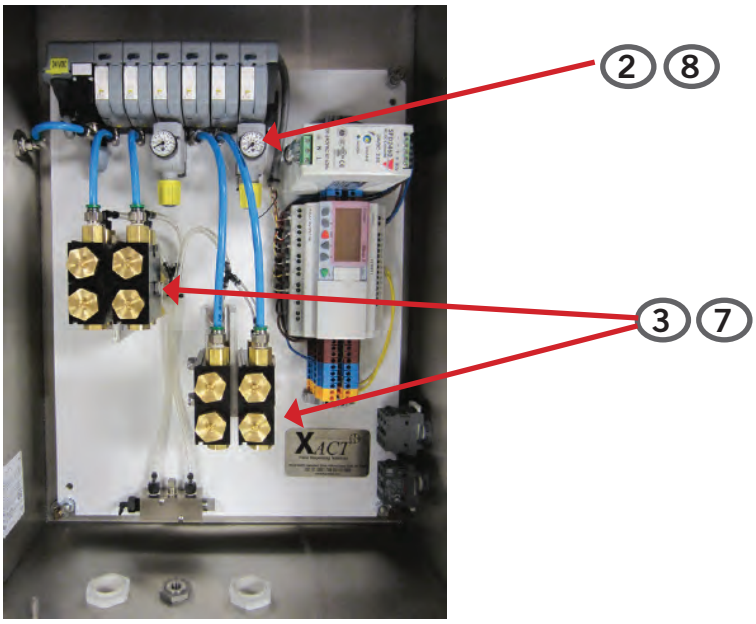
Pump Info:

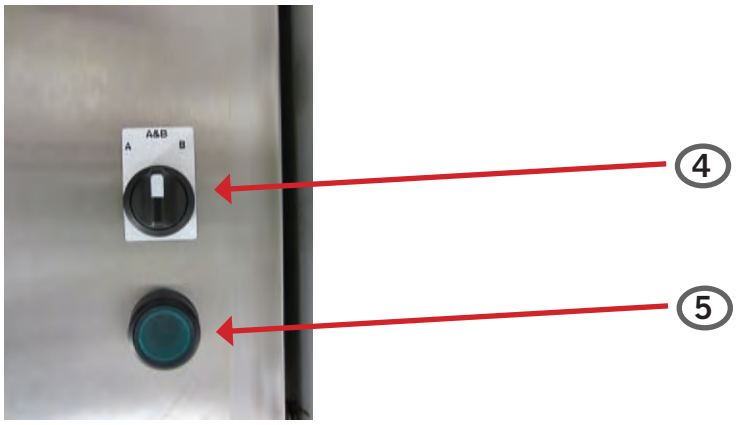
Pump Diagram



Pumps are assembled in two-pump manifolds. Manifolds share a common air and oil inlet. There are four pump manifolds in the box. When plumbing the outlet lines, note there is a bulkhead with six outputs. These are designated for four oil and two air lines. Plumb such that the **Left** is the **Upper** and the **Right** is the **Lower**.

XACT Pump





External System Controls

PRIMING STEPS: YOU ARE NOW READY TO PRIME YOUR OTL SYSTEM:

1. Fill system reservoir. (GOLD recommends JAX Conveyor-Glide LT 22.)
2. Set solenoid valve regulators at 0 PSI.
3. XACT pumps are shipped at FULL STROKE. Use this setting for PRIME cycle only.
4. Set selector switch on right side of control cabinet to “ALL”.
5. Depress green system activation button on right side of control cabinet (button should stay depressed and light up.) System is programmed to automatically turn off.
6. Repeat the steps 4 & 5 until all air is purged from the oil lines.
7. Once system is primed, set Upper pumps to 1 turn out and Lower pumps to 1 1/2 turns out. Refer to pump adjustment sheet on page 7.
8. Set solenoid valve regulators at 18-20 psi.

WIRING REFERENCE GUIDE

Information below is for informational purposes only. All units are shipped with wiring ready for use.

Color Schematic for Wiring

-Control power is 24VDC UL508 compliant
-Standard colors are bown (+24VDC) and blue (-24VDC)

GOLD uses colored terminal blocks to assist with wiring. Yellow is used for incoming (+24VDC) signal from remote sensing and delivery (photo eye pairs).

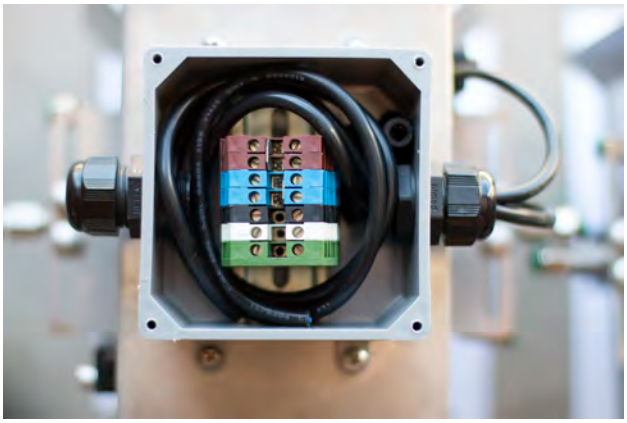
6-Wire Sensing and Delivery Connections

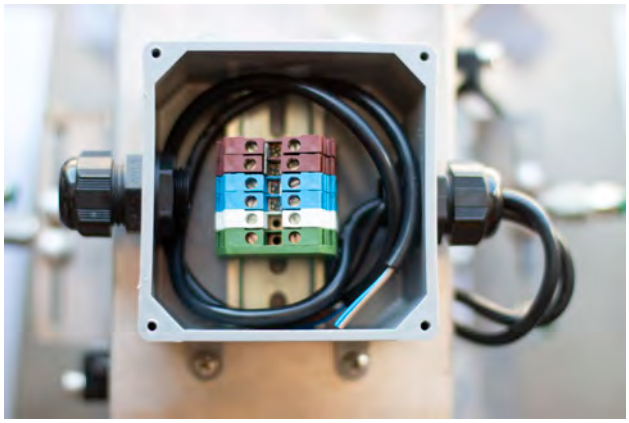
-Orange is deemed "brown" and used for +24VDC connections
-Blue is common and used for -24 VDC connections

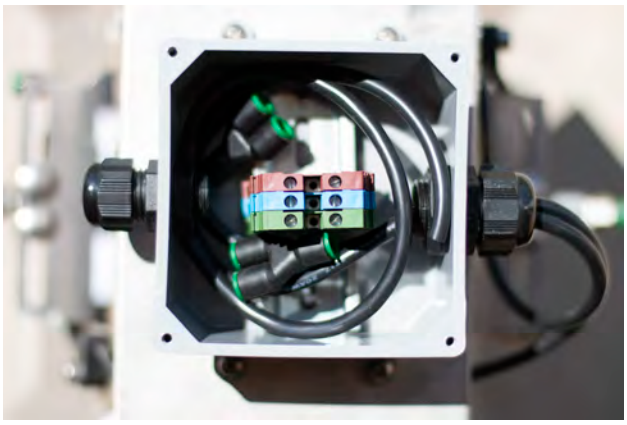
Black wire: Line 1 (P1) Lower positive (+) return

White wire: Line II (P2) Lower positive (+) return
Green wire: Line III (P3) Lower positive (+) return

Note: Due to configuration of the chain, ONLY lower photo eye pair is used. The inputs are jumpered at the control terminals to activate the upper nozzle outputs when the lower photo eye pair is activated.







The OTL System is shipped with the program set to run lubrication for 50 minutes then automatically shut-off in the event that the lubrication time frame requires adjustment. Please see steps below:

1. Press OK button, then ESC to open the controller menu.
2. Press (OK) twice to STOP the current program.
3. Press (-) to drop down to Parameters menu.
4. Press (OK) to enter Parameters menu.
5. Press (-) to reach time adjustment.
6. Press (OK) to enter time adjustment.
7. Press (-) or (+) as desired to adjust time.
8. Press (OK) to save value.
9. Press ESC to leave menu.
10. Press (OK) to RUN program.

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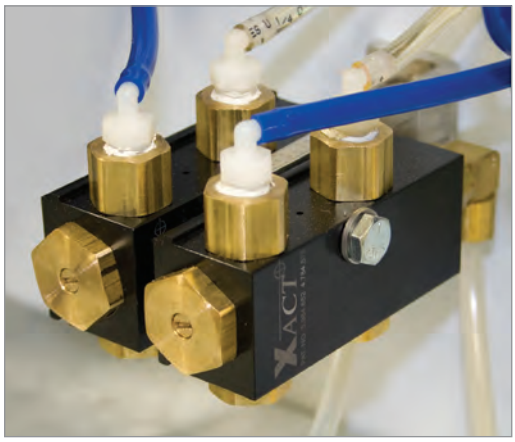
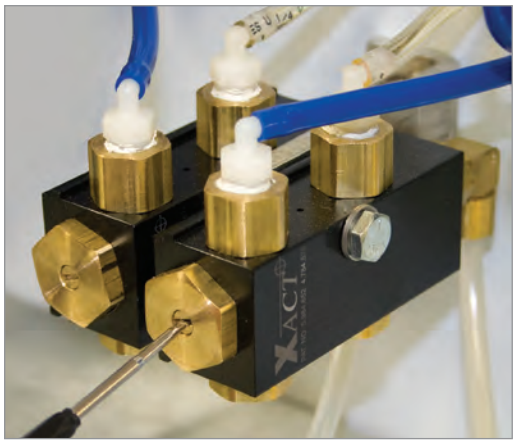
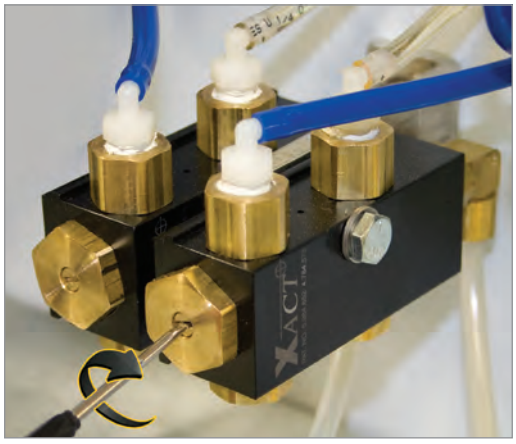
Pump Adjustment

Modular Pneumatic Pumps

Genuine Optimized Lubricant Delivery







Pump Adjustment:

- Pumps are shipped at full stroke (.012cu in.)
- Pumps are mechanically adjustable via adjustment cap
- A size 4-5 flat blade works best, larger will not fit
- To reduce volume turn the adjustment stem clockwise
- Each turn reduces the volume by 1/6 (.002 cu in)
- Pumps can be reduce to zero volume (OFF)
- Recommended standard volume is .004 cu in

To adjust to this setting:

1) Turn pumps “OFF” or in 6+ full turns
2) Increase pump volume (counterclockwise)
3) Turn two full rotations

Pump Info:

Pumps have a 9:1 ratio between air inlet pressure and liquid outlet pressure. Minimum pressure for the pump should be 40psi while activating. Recommended pressure for accurate pump operation is 60psi.

Pumps will generate 540psi of outlet pressure with standard 60psi inlet pressure during a blocked line situation. This typically clears the line of any debris and returns proper function. In the event the line does not clear, the lubricant will not be dispensed. The tubing is selected for 1400psi nomial working pressure, and will not fail in the event of a blocked line. You must inspect lines and delivery points periodically to ensure fluid is being dispensed.

Pumps are repeatable for volume for 300 million cycles. Once the selected volume is mechically adjusted, there should be no measurable deviation in pump output. In the event there is a detectable deviation in fluid volume output, contact GOLD to secure a seal replacement kit.

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