

Valve Adapters with Double Solenoid, Valve Pass Thru and Pressure Switch, with Rc 1/4 (BSPT) Air Port

Rev.	Description	Initiator	Date
05	Eco 18901; Added Inline Filter 3490-0010005-01; Added Dim (59).	CF	4/14/2020

Table 2: 3-Pin Valve Pin Block Signals

Pin	Signal	Wire
1	Unlatch (+19-29 VDC)	Brown
3	0 VDC	Blue
4	Latch (+19-29 VDC)	Black

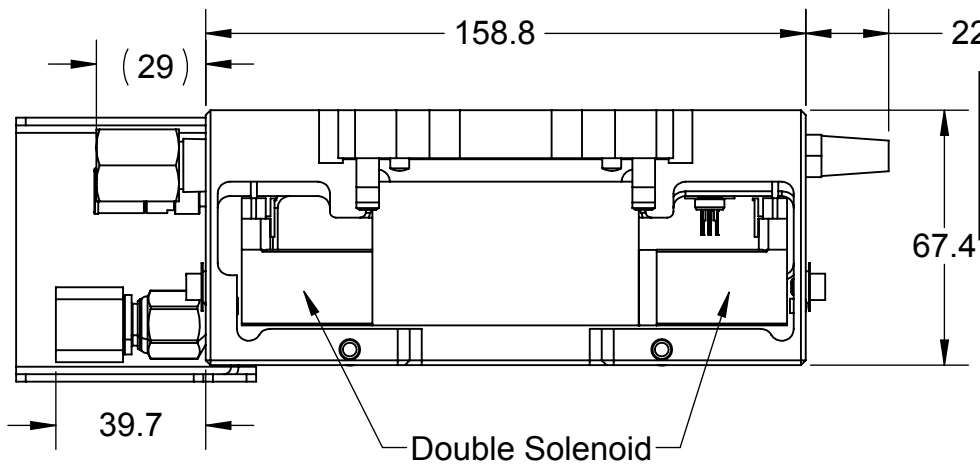
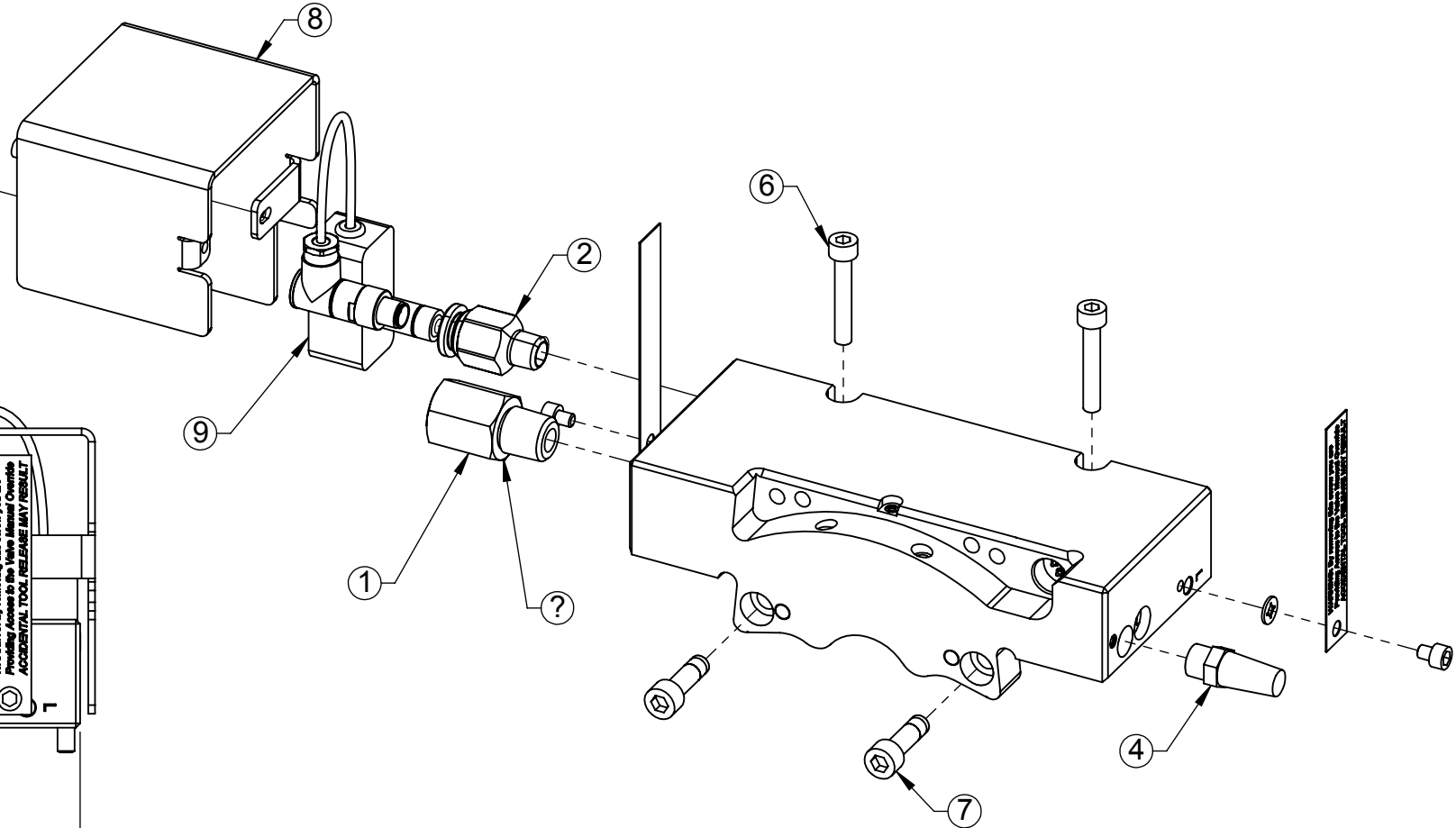
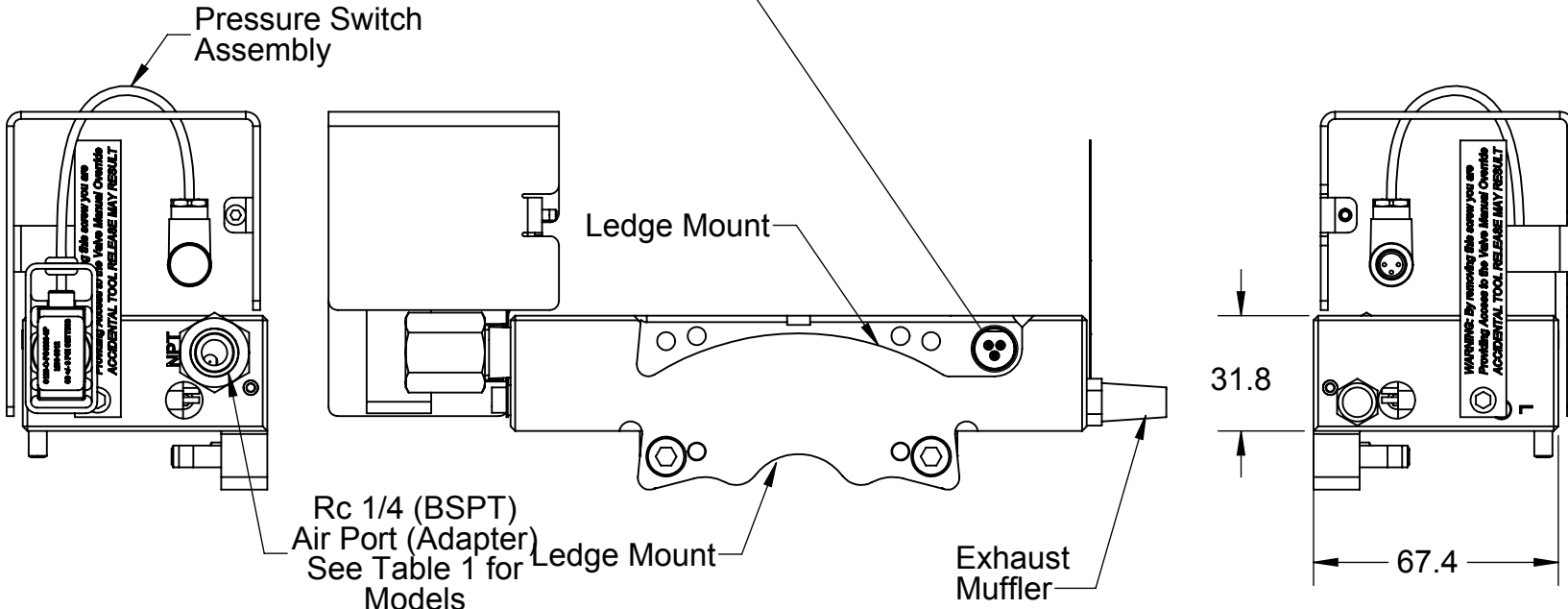
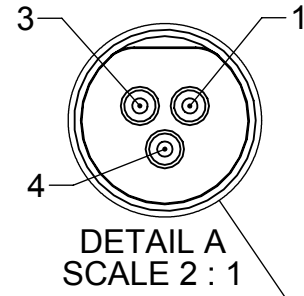


Table 1: Valve Adapter Port Size

Valve Adapter Model	Air Port Size
9121-JP10-M	Rc 1/4 BSPT
9121-JU7-M	G 1/4 BSPP

ITEM NO.	QTY	PART NUMBER	DESCRIPTION
1	1	3405-1030005-01	Fitting, Adapter, 1/4NPT to G1/4
	1	3405-1030008-01	Adapter, 1/4 NPT Male x Rc 1/4 Female
2	1	3405-1210026-01	Fitting, Straight, 3/8" Tube, 1/8" NPTF
4	1	3490-1010002-00	Conical Breather 1/8 NPT
5	2	3500-1057006-15A	M3-0.5 x 6mm SHCS, Blue, Pre-Applied
6	2	3500-1064030-12	M5-0.8 x 30mm SHCS, Zinc
7	2	3500-1066020-15A	M6-1 x 20mm SHCS, Blue, Pre-Applied
8	1	3700-20-10986	PS1000 Guard for use with QC310 Valve Adapters
9	1	9015-20-1265	Robust PS1000 Sensor Assembly

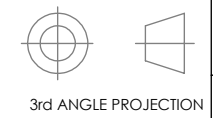
- Notes:**
- Valve Adapter to Tool Changer mounting are shown on Sheet 2.
 - Pneumatic and Electrical Schematic are shown on Sheet 3.
 - Other models are covered in the 9620-20-C-Jxx Valve adapter with a Double Solenoid, Valve Pass Thru and Pressure Switch Manual.

NOTES: UNLESS OTHERWISE SPECIFIED.
DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.

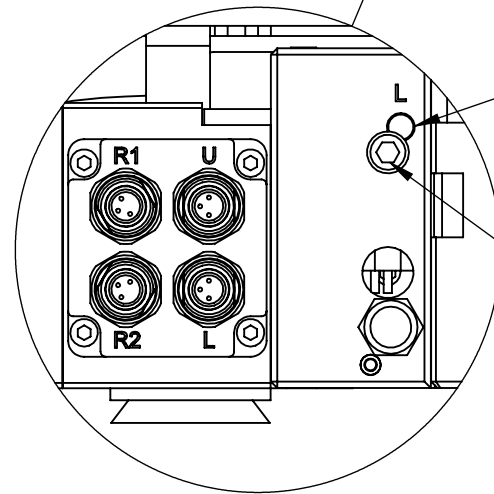
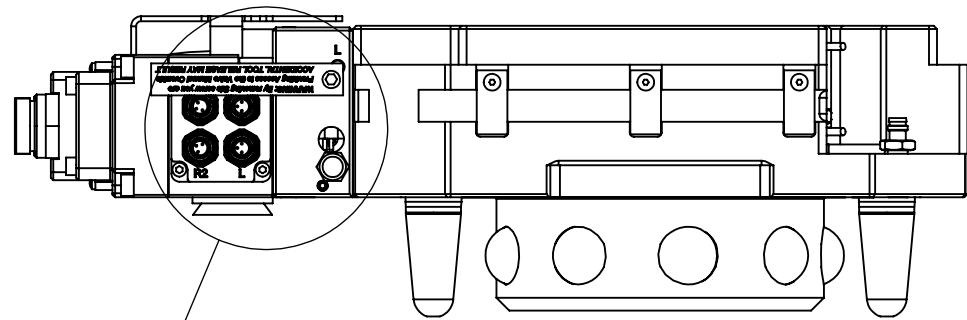


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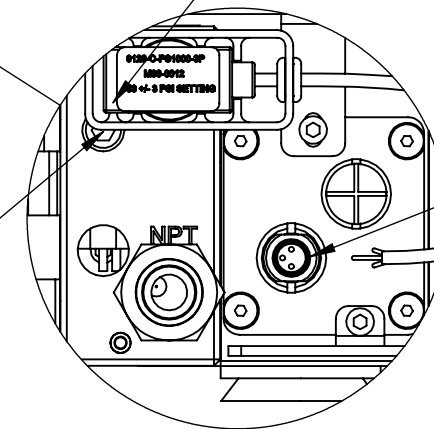
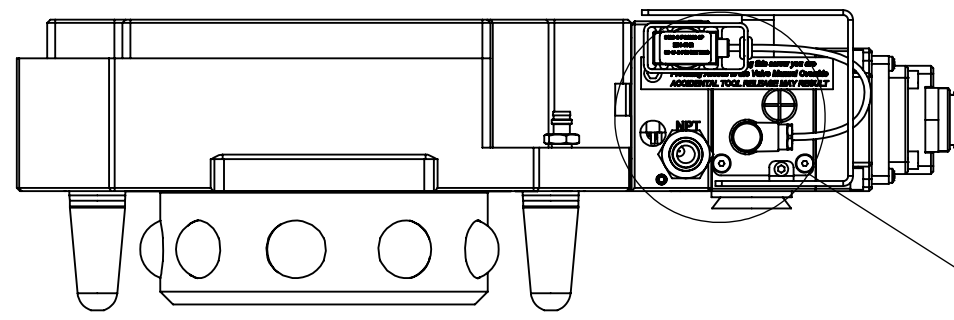
DRAWN BY: E. McCain, 2/19/16		TITLE	
CHECKED BY: W. Berrocal, 2/23/16		Valve Adapter, Double Solenoid, Rc, QC-310 w/ Valve Pass Thru and Pressure Switch	
PROJECT # 141030-3	SHEET 1 OF 3	SCALE 1:2	SIZE B
DRAWING NUMBER 9630-20-Jxx Dou Sol Pas Th Pr Sw 310		REVISION	



DETAIL C
SCALE 2 : 3

LED indicates if power is supplied to the LOCK side of the solenoid.

WARNING
LOCK Valve Manual Override Access.
(Supplied w/ Cover Screw and Warning Label)
See Note 1.

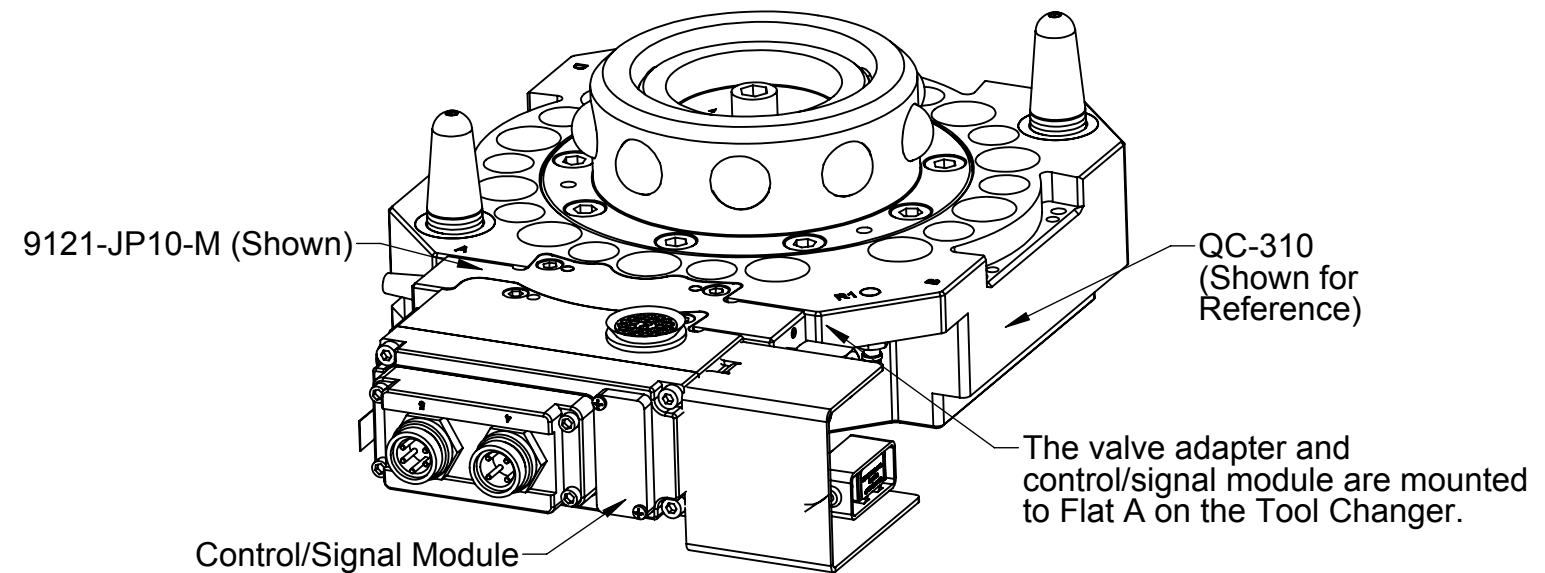


LED indicates if power is supplied to UNLOCK side of the solenoid.

Pressure Sensor Connector

WARNING
UNLOCK Valve Manual Override Access.
(Supplied w/ Cover Screw and Warning Label)
See Note 1.

DETAIL B
SCALE 2 : 3



9121-JP10-M (Shown)

QC-310
(Shown for Reference)

The valve adapter and control/signal module are mounted to Flat A on the Tool Changer.

Control/Signal Module

- Notes:
- WARNING: Tool Release Will Occur with actuation of the Unlatch Valve Manual Override. Use of the valve manual override is restricted to contingency situations. The tool changer and associated tool should be in a stand or storage location prior to actuation of the manual override.**

NOTICE: Actuation of valve override buttons requires very little travel (~1mm) and only a small amount of force. Applying excess force can damage the solenoid or cause override button to stick in one position. Use non-sharp object, similar to ball nose 2mm Allen key, to gently depress the override button; an air release should be heard when the solenoid is activated.

- The valve adapters with double solenoid are designed to be integrated with specific models of control/signal modules with a valve connector. The Valve Adapter provides routing for the ready to lock sensor cable from the Tool Changer to the control/signal module.
- The Valve Adapters include a Pressure Switch Assembly. The Pressure Switch turns on (indicated by red LED) when the supply pressure to the Valve reaches or exceeds 60 psi (Note: the Pressure Switch output is PNP). **The air pressure to the Pressure Switch is NOT to exceed 145 psi.** The Pressure Switch is encapsulated in translucent 3M DP125 potting to achieve IP65 rating.
- The Pressure Switch inserts into the 6mm push-to-connect fitting.

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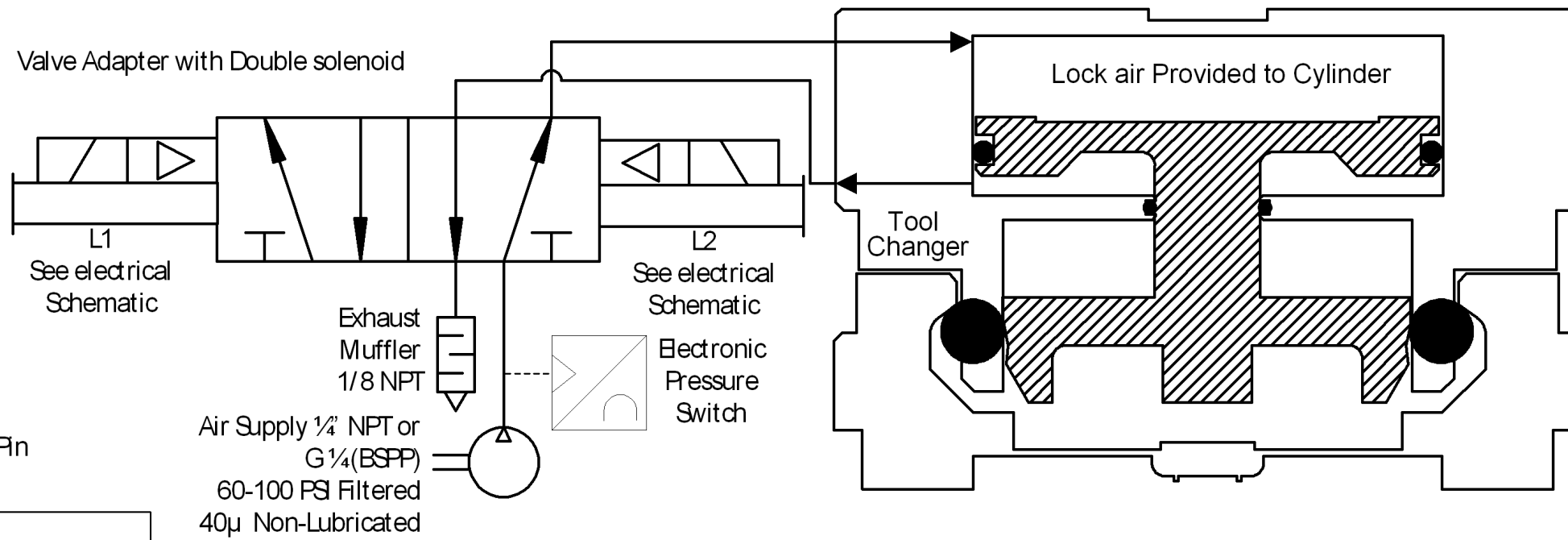


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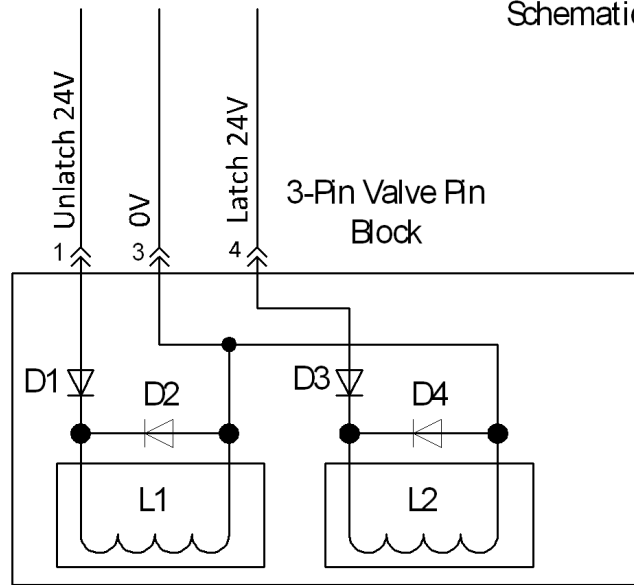
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CHECKED BY: W. Berrocal, 2/23/16		Valve Adapter, Double Solenoid, Rc, QC-310 w/ Valve Pass Thru and Pressure Switch		
PROJECT #	141030-3	SHEET	2	OF 3
SCALE	1:4	SIZE	B	DRAWING NUMBER
9630-20-Jxx Dou Sol Pas Th Pr Sw 310				REVISION
				05

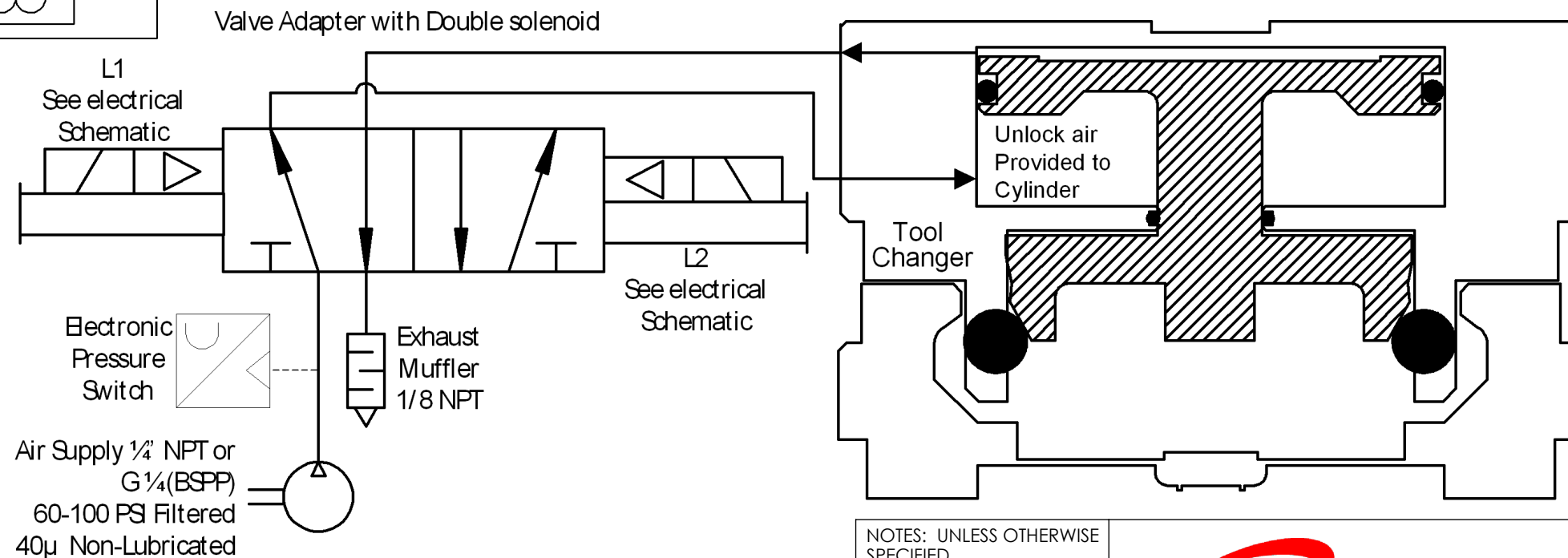
Double Solenoid shown with Energized Lock Solenoid (L2)



Electrical Schematic



Double Solenoid shown with Energized Unlock Solenoid (L1)

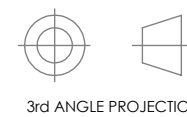


Notes:

1. The 9121-JP10-M valve adapter utilizes a double solenoid 5/2 valve. The valve requires supply voltage between 19-29V. The Valve CV is 1.1
2. The valve must be supplied clean, dry, non-lubricated air at 60 to 100 psi (4.1-6.9 Bar) and filtered at 40 microns or better. NOTE: Supply pressure is also fed to the electronic Pressure Switch. The valve will NOT operate correctly if insufficient air pressure is supplied.
3. It is critical that the exhaust mufflers are not restricted. As part of a preventative maintenance program, periodically inspect and/or replace the exhaust mufflers.

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PROJECT # 141030-3	SHEET 3 OF 3	SCALE 1:4	SIZE B
DRAWING NUMBER 9630-20-Jxx Dou Sol Pas Th Pr Sw 310		REVISION 05	