Description

See Figure 1. The Rhino SD/XD Pump Overlap Time-Delay module consists of a pneumatic time-delay valve (1) that is installed into the drum empty circuit.

When a drum empty condition occurs, both pumps must be operating to perform a standard changeover from the active to the standby pump. The time-delay valve delays the shutdown of the air motor on the active pump to prevent loss of output pressure.

Pump overlap is necessary if a drop in supply pressure to the dispense system is seen during the pump changeover sequence. This typically occurs in systems that use short hoses or header system circuits.

Installation

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

See Figures 2 and 4 to install the time-delay valve into the drum empty circuit.

Adjustment

See Figure 1.

The time-delay valve is adjustable from 0−30 seconds.

NOTE: The overlap time is the amount of time that both pumps are active.

Turn the adjustment screw (2) clockwise (in) to increase the overlap time.

Turn the adjustment screw (2) counterclockwise (out) to decrease the overlap time.

NOTE: Turning the adjustment screw fully counterclockwise (out) disables the overlap time and may produce a momentary drop in output pressure when the standby pump comes up to speed.

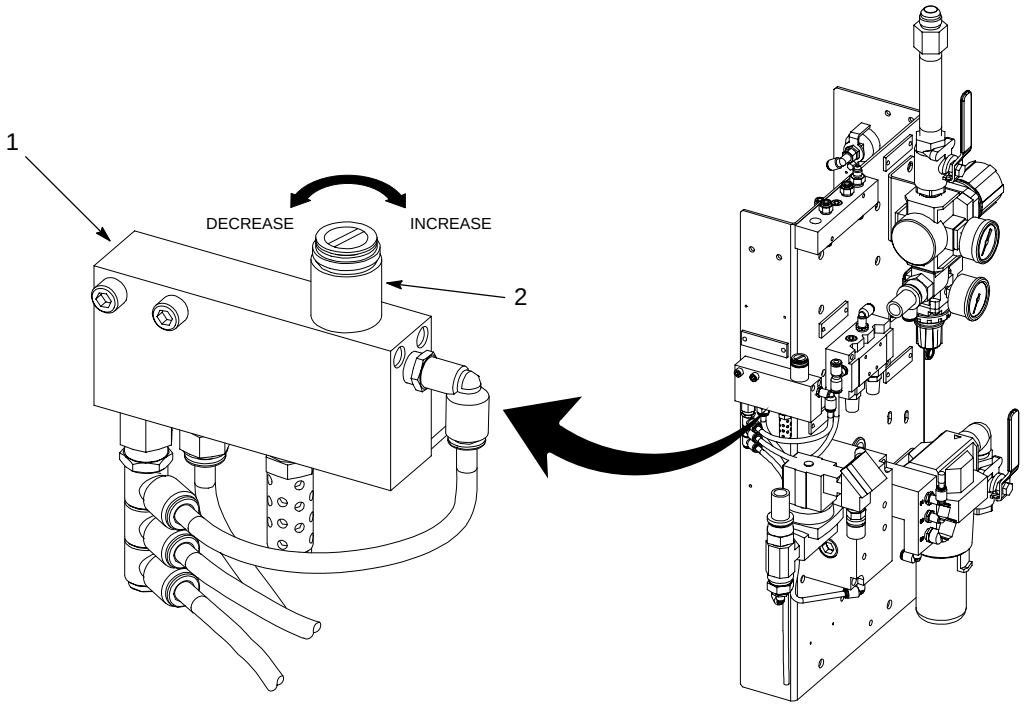

Figure 1 Pump Overlap Time-Delay Module

Parts

See Figure 2 and the following parts list. To order parts, call the Nordson Customer Service Center or your local Nordson representative.

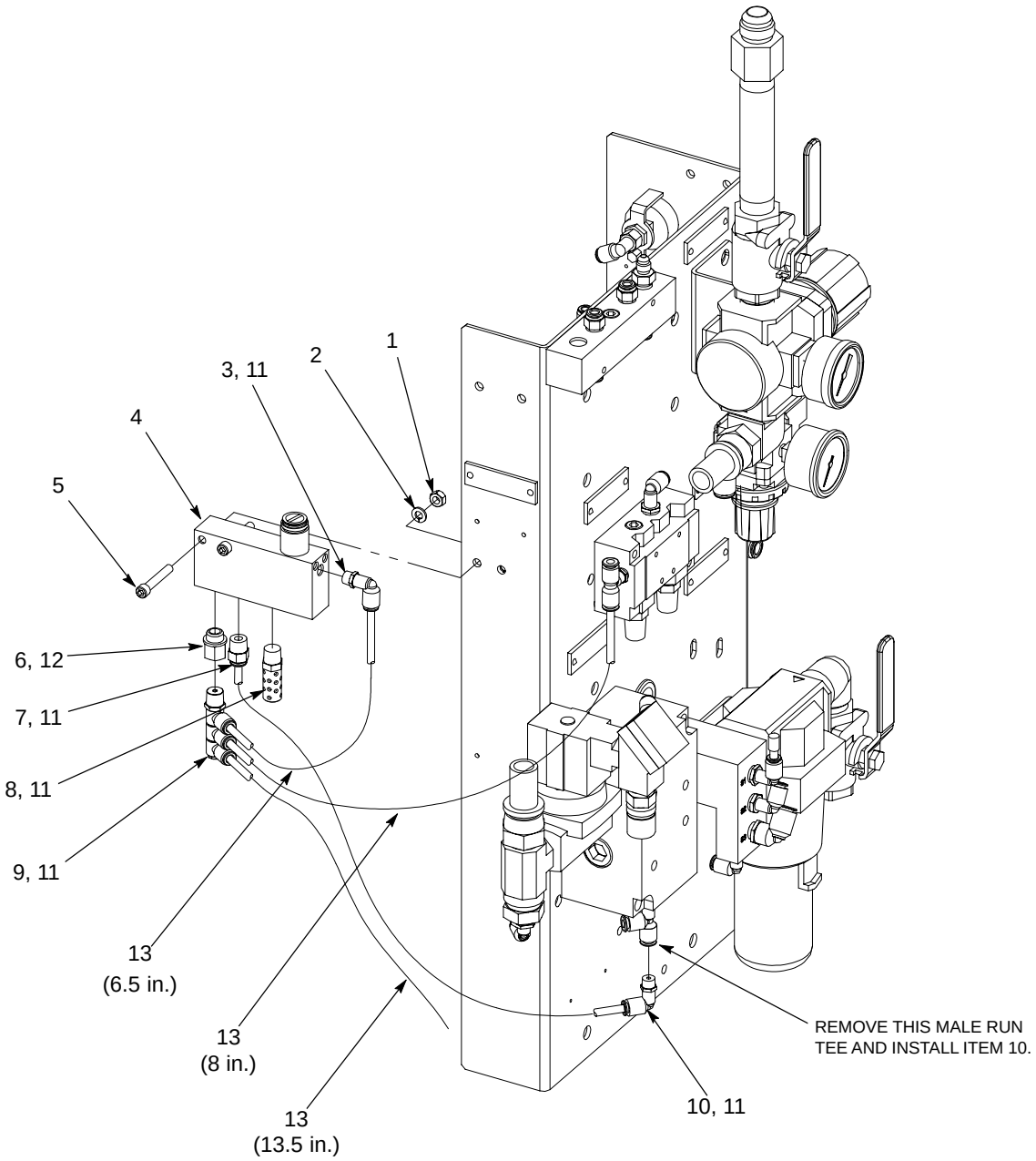

Figure 2 Pump Overlap Time-Delay Module Parts

Item	Part	Description	Quantity	Note
—	1040565	Module, pump overlap, time−delay	1	
1	984130	• Nut, hex, heavy, $^1/_4$-20, steel, zinc	2	
2	345977	• Washer, lock, e, split, 1/4, zinc ,14451−GA	2	
3	1040622	• Elbow, male, $^1/_4$ T x $^1/_8$ R (PT)	1	
4	1040567	• Valve, time-delay, 3-way, 2-pos, G $^1/_4$ ISO thds	1	
5	981984	• Screw, socket, $^1/_4$-20 x 1.500, BL	2	
6	331521	• Adapter, G $^1/_4$ ISO x $^1/_4$ NPT	1	
7	1040627	• Connector, male, $^1/_4$ T x $^1/_4$ R (PT)	1	
8	1040664	• Muffler, male, $^1/_4$ BSPT	1	
9	1040634	• Elbow, male, $^1/_4$ T x $^1/_4$ NPT, triple universal	1	
10	972119	• Elbow, male, $^1/_4$ tube x $^1/_8$ NPT	1	
11	900481	• Adhesive, pipe/thread/hydraulic sealant (paste)	AR	A
12	900464	• Adhesive, Loctite 242, blue, removable, 50ml	AR	B
13	1010810	• Tubing, $^1/_4$ OD polyethylene, flame resist	2.4 ft	

NOTE A: Apply to NPT threads.

B: Apply to male threads only on adapter.

AR: As Required

Time-Delay Valve Pneumatic Schematic

See Figure 3.

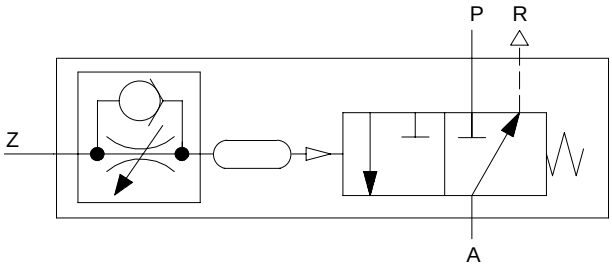

Figure 3 Time-Delay Valve Pneumatic Schematic

System Pneumatic Schematics

Figure 4 illustrates a system with a time-delay module.

See Figure 5 if it is necessary to reconfigure the system without a time-delay module.

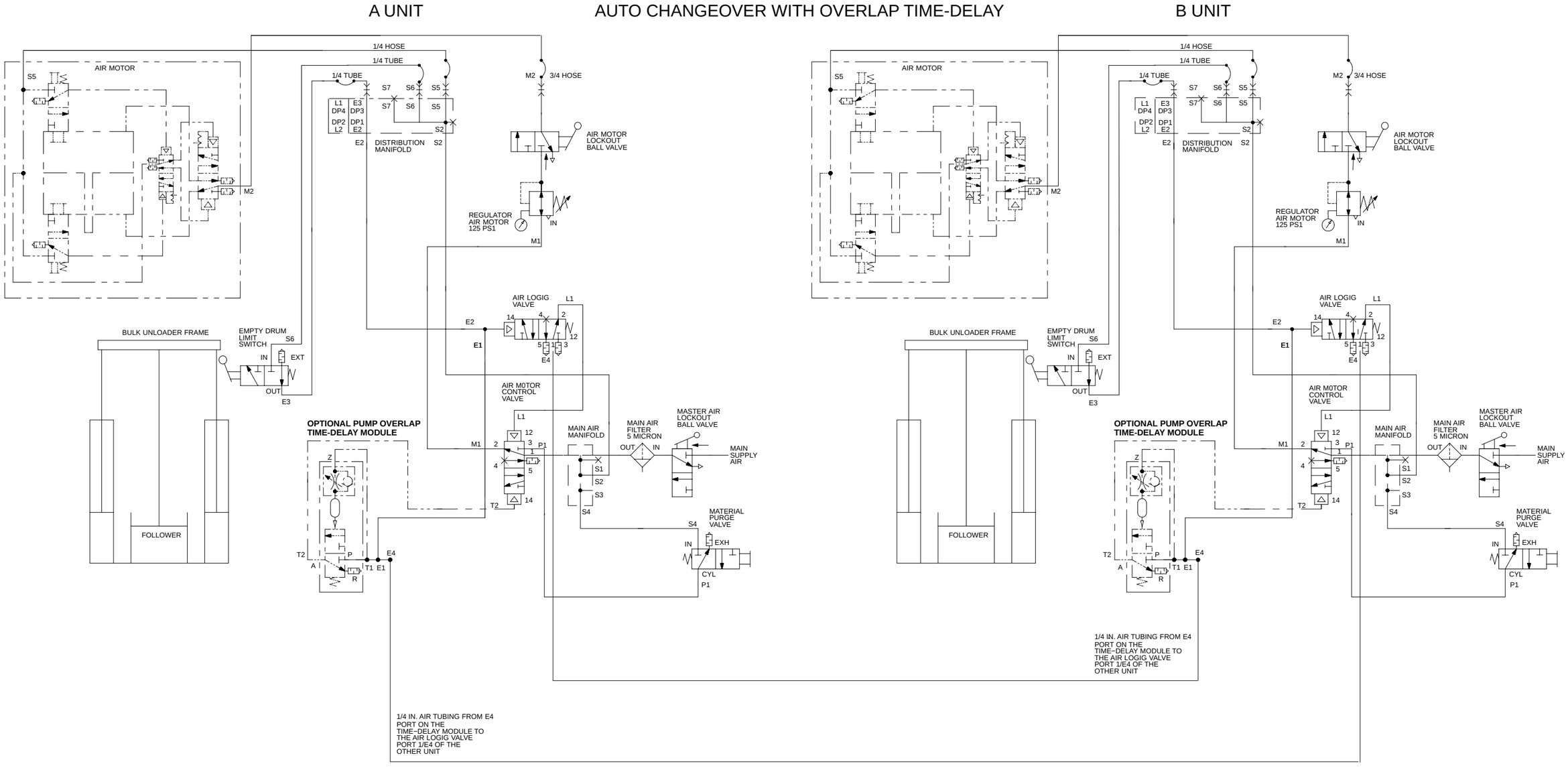

Figure 4 Auto Changeover with Overlap Time-Delay Pneumatic Schematic

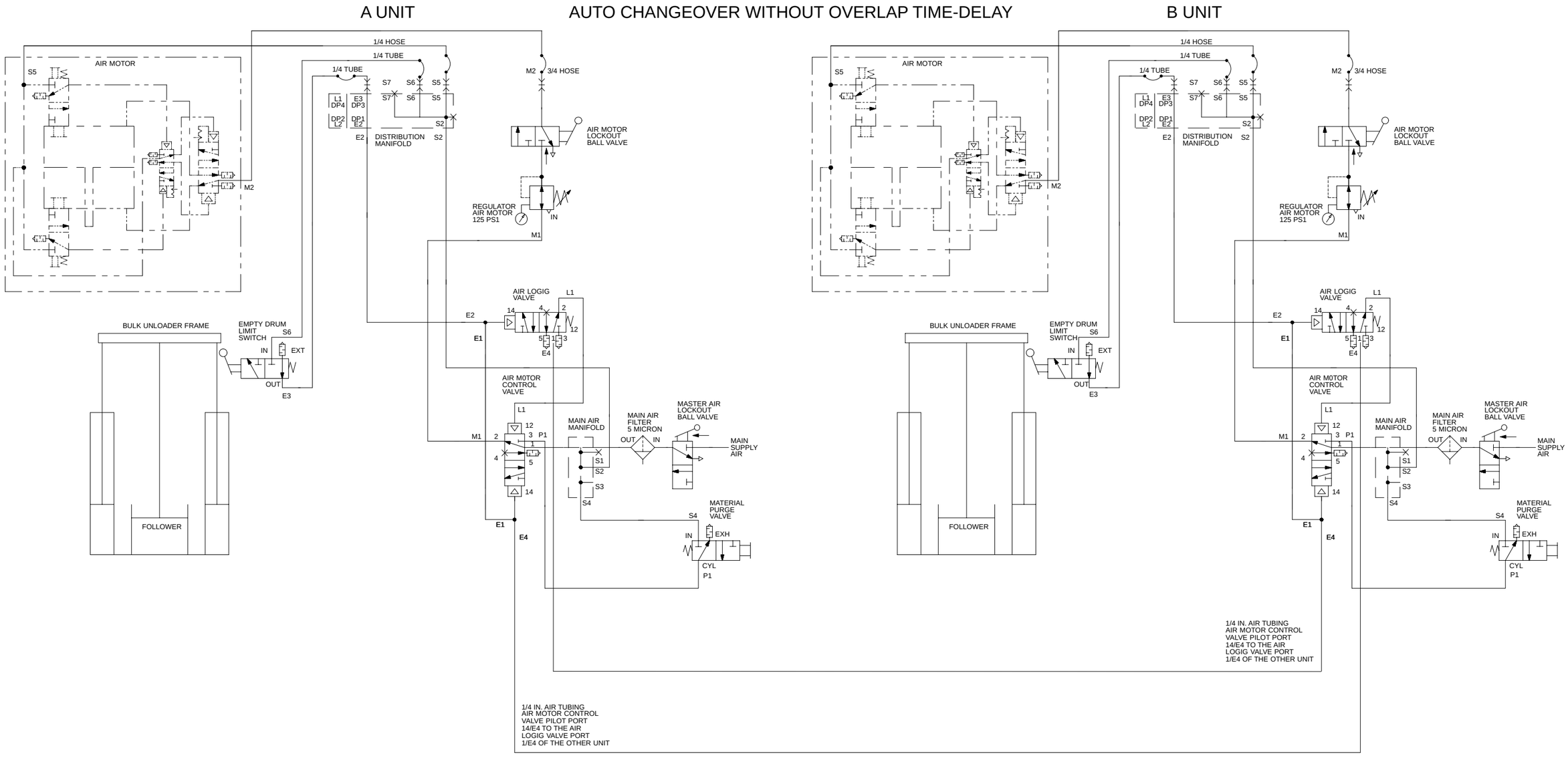

Figure 5 Auto Changeover without Overlap Time-Delay Pneumatic Schematic