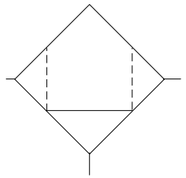
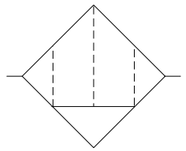


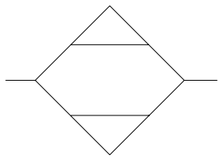
PARTICULATE FILTER This 5 micron filter is first in line, and like the micro mist separator, it has an auto-drain built into the bowl. It has a centrifugal water separator.



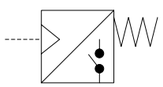
MICRO MIST SEPARATOR This secondary filter removes 95% of particles 0.01 micron size. It also removes oil to 0.01mg/Nm^3 until cartridge becomes saturated.



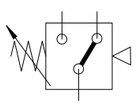
ODOUR REMOVAL FILTER This device is used for the final filtration for the THIII head.



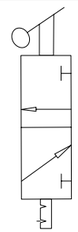
MEMBRANE AIR DRYER This device removes evaporated water from the air line. There is a continuous passage of air from this device (to carry away the water) that makes a quiet hiss.



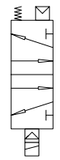
PRESSURE SWITCH



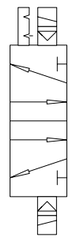
VACUUM SWITCH



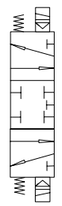
STOP AND DRAIN VALVE Used on the filter/regulator assembly.



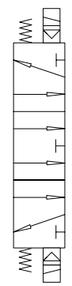
2-POSITION SPRING RETURN SOLENOID VALVE



2-POSITION DOUBLE SOLENOID VALVE



3-POSITION CLOSED CENTER SOLENOID VALVE



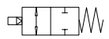
3-POSITION EXHAUST CENTER SOLENOID VALVE



PRESSURE GAUGE Mechanical pressure gauges are of limited accuracy.



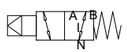
LATCHING 3-PORT VALVE WITH PUSH BUTTON



PILOT OPERATED 2-PORT VALVE



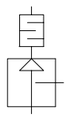
PILOT OPERATED 3-PORT VALVE



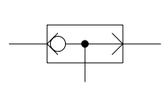
PILOT OPERATED 5-PORT VALVE



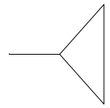
VACUUM CUP



VACUUM GENERATOR (AIR EJECTOR)



SHUTTLE VALVE Allows air that enters either upper port to exit the lower one.



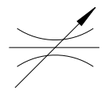
COMPRESSED AIR SOURCE



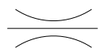
SILENCER



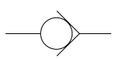
NON-ADJUSTABLE CYLINDER SPEED CONTROL



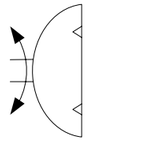
NEEDLE VALVE



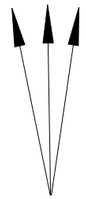
FLOW CONTROL ORIFICE



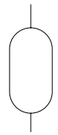
CHECK VALVE



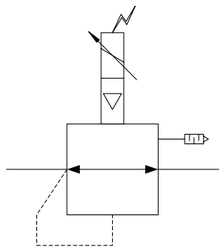
ROTARY ACTUATOR Similar to a pneumatic cylinder but causes limited rotary motion instead of linear motion.



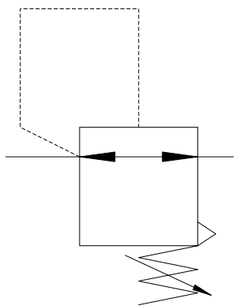
MULTI-HOLE AIR JET



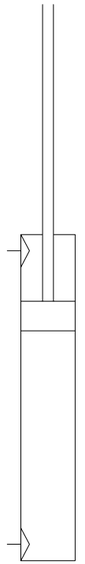
ACCUMULATOR



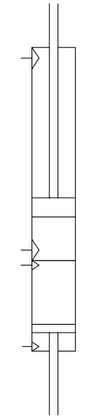
PROPORTIONAL REGULATOR This is a PLC controlled pressure regulator. Changes to the input signal voltage result in a proportional change in pneumatic pressure.



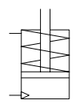
PRESSURE REGULATOR



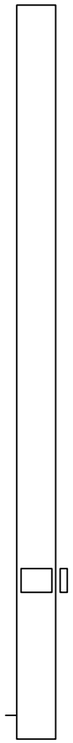
DOUBLE ACTING PNEUMATIC CYLINDER



BACK-TO-BACK PNEUMATIC CYLINDERS



SINGLE ACTING PNEUMATIC CYLINDER, SPRING RETRACT



MAGNETICALLY COUPLED CYLINDER

INDEX

1: Glossary
2: Engine and standard filter/regulator
3: Center back mounted engine & filter/regulator
4: Filtration/regulation for THIII
5: Load table
6: Unload table
7: Multi cassette unit
8: Fetcher
9: Delicate media fetcher
10: Picker
11: Delicate media picker
12: Slip sheet removal
13: Single plate punch
14: Dual plate punch
15: APL Transfer module
16: APL Picker Gantry
17: APL Towers
18: APL Shutter & Blower
19: APL Pusher

Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA
GLOSSARY AND INDEX

DESIGNED BY	DRAWN BY		
DON MacKAY	DON MacKAY		
MILLIMETERS UNLESS SPECIFIED	DATE 27 APRIL 2007	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	1	19

THIII DEBRIS REMOVAL NOZZLE

500-00303_
TEC CYLINDER

50-2664_
2 SETS
P-DOOR CYLINDERS
(MANUAL UNIT ONLY)
CYLINDER RETRACTED, DOOR IS OPEN

500-00302_
LEC LOCK CYLINDER

50-2739_
2 SETS
LEC/TEC CYLINDERS

ROLLER CYLINDERS
500-01105
AWAY SIDE
500-01104
HOME SIDE

BALANCE WEIGHT CYL. AWAY SIDE

50-2557_
2 SETS
BALANCE WEIGHT CYL. HOME SIDE

BACKBONE POSITIONING CYLINDERS
500-00362_
2 SETS
(LARGE DRUM)
500-01246_
2 SETS
(SMALL DRUM)

HEADSTAGE CLAMP CYLINDER
500-01724_

NOTES:
1. ON SINGLE SOLENOID SPRING RETURN VALVES, BLACK TUBING IS PRESSURIZED BY DEFAULT WHEN VALVE HAS NO ELECTRICAL POWER INPUT.
2. ON SINGLE SOLENOID SPRING RETURN VALVES, THE VALVE NAME GENERALLY INCLUDES AN INDICATION OF THE ACTION CAUSED BY ENERGIZING THE VALVE: FOR EXAMPLE, THE VALVE NAMED “Debris airjet on” HAS A DEFAULT POSITION OF OFF. ENERGIZING THE VALVE TURNS THE AIRJET ON.
3. THREE-POSITION SOLENOID VALVES ARE LABELED WITH BOTH COMMANDS, AND “LOCK” IN THE DEFAULT POSITION.
4. VALVE NAMES THAT ARE IN QUOTATION MARKS ARE IDENTICAL TO THE FIRMWARE COMMAND THAT TURNS THEM ON.

TO HEAD DRY AIR (IF USED)

TO PRESSURE SENSOR

NOTE: RED TUBE CONNECTS TO END PORT, NOT SIDE PORT OF PR1 & PR2

PR 1
PR 2

TO AUTOMATION MANIFOLDS AND COMPONENTS

AIR SUPPLY MAX 120 PSI (8 BAR)

TH2.X FILTER/REGULATOR
50-2713_
SET TO 84 PSI
TH III EQUIPPED MACHINES DO NOT USE 50-2713. SEE SHEET 1B

“roller on/lock/off”
“debris aircurtain on”
Head air, Safeties
“tec unlock”
Release Enable
“balancer extendaway”
“balancer extendhome”
“platedoor open”
Backbone horiz/lock/tilt
“debris airjet on”
Backbone unload/lock/load
LEC lock
“headstage unlock”
LEC/TEC on/lock/off

REGULATORS ARE FACTORY SET. DO NOT ADJUST

TO WATER LINE INSERTION BLOCK

ENGINE MANIFOLD
50-2654_

RED ¼"
BLACK ¼"
BLACK 5/32"
RED 5/32"
BLACK 1/2"
BLACK 5/16"
BLK ¼"

Kodak

DOC, SCHEMATIC, PNEUMATIC,MTA BASE DEVICE

DESIGNED BY	DRAWN BY			
DON MacKAY	DON MacKAY			
MILLIMETERS UNLESS SPECIFIED	DATE 26 APRIL 2007	SIZE B	SCALE NTS	
PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	2	19

NOTES:
1. ON SINGLE SOLENOID SPRING RETURN VALVES, BLACK TUBING IS PRESSURIZED BY DEFAULT WHEN VALVE HAS NO ELECTRICAL POWER INPUT.
2. ON SINGLE SOLENOID SPRING RETURN VALVES, THE VALVE NAME GENERALLY INCLUDES AN INDICATION OF THE ACTION CAUSED BY ENERGIZING THE VALVE: FOR EXAMPLE, THE VALVE NAMED “Debris airjet on” HAS A DEFAULT POSITION OF OFF. ENERGIZING THE VALVE TURNS THE AIRJET ON.
3. THREE-POSITION SOLENOID VALVES ARE LABELED WITH BOTH COMMANDS, AND “LOCK” IN THE DEFAULT POSITION.
4. VALVE NAMES THAT ARE IN QUOTATION MARKS ARE IDENTICAL TO THE FIRMWARE COMMAND THAT TURNS THEM ON.

THIII DEBRIS REMOVAL NOZZLE

500-00302_ LEC LOCK CYLINDER

50-2664_ 2 SETS

P-DOOR CYLINDERS (MANUAL UNIT ONLY)

CYLINDER RETRACTED, DOOR IS OPEN

ROLLER CYLINDERS

500-01105 AWAY SIDE

500-01104 HOME SIDE

500-00303_

TEC CYLINDER

BALANCE WEIGHT CYL. AWAY SIDE

50-2557_ 2 SETS

BALANCE WEIGHT CYL. HOME SIDE

BACKBONE POSITIONING CYLINDERS

500-00362_ 2 SETS (LARGE DRUM)

500-01246_ 2 SETS (SMALL DRUM)

LEC/TEC CYLINDERS

50-2739_ 2 SETS

HEADSTAGE CLAMP CYLINDER 500-01724_

FUNNEL IS OPTIONAL

AIR SUPPLY MAX 120 PSI (8 BAR)

SET TO 84 PSI

TO THIII FILTER, 500-05188_ WHEN USED

TO AUTOMATION MANIFOLDS AND COMPONENTS

“roller on/lock/off”

“debris aircurtain on”

“platedoor open”

LEC lock

“tec unlock”

“balancer extendaway”

“balancer extendhome”

“lecfunnel dn”

“headstage unlock”

Backbone horiz/lock/tilt

Release Enable

Backbone unload/lock/load

“debris airjet on”

LEC/TEC on/lock/off

PR 1

PR 2

NOTE: RED TUBE CONNECTS TO END PORT, NOT SIDE PORT OF PR1 & PR2

TO PRESSURE SENSOR

TO WATER LINE INSERTION BLOCK

REGULATORS ARE FACTORY SET. DO NOT ADJUST

RED 5/32" · BLACK 5/32" · RED ¼" · BLACK ¼" · BLK ¼" · BLK 5/32"

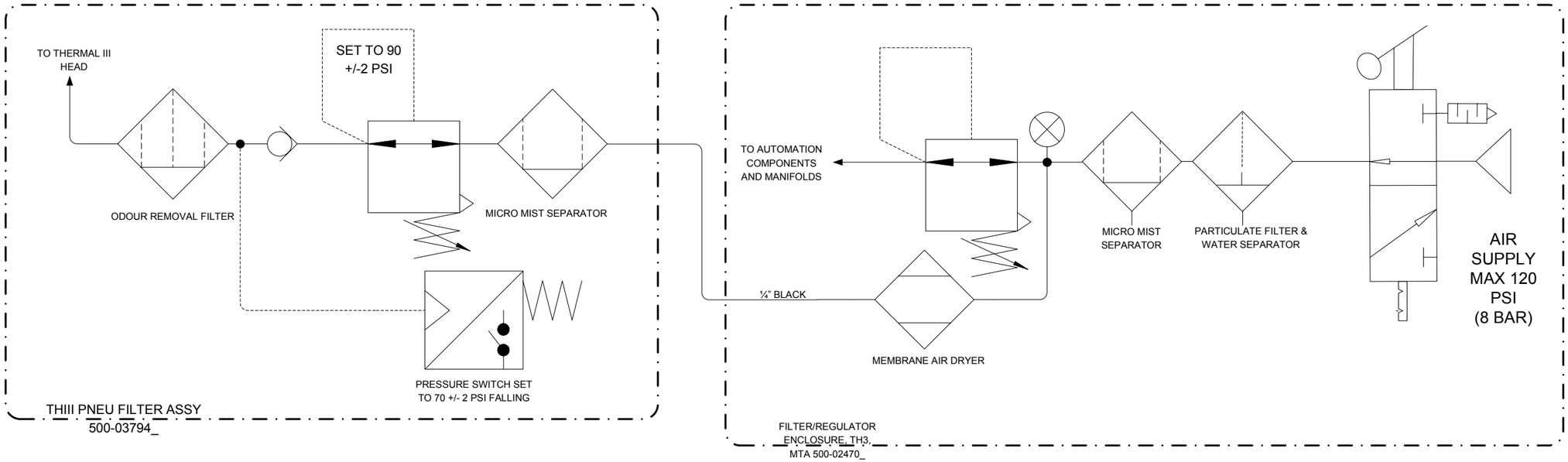
FILTER/REGULATOR & ENGINE MANIFOLD 500-04220_

Kodak

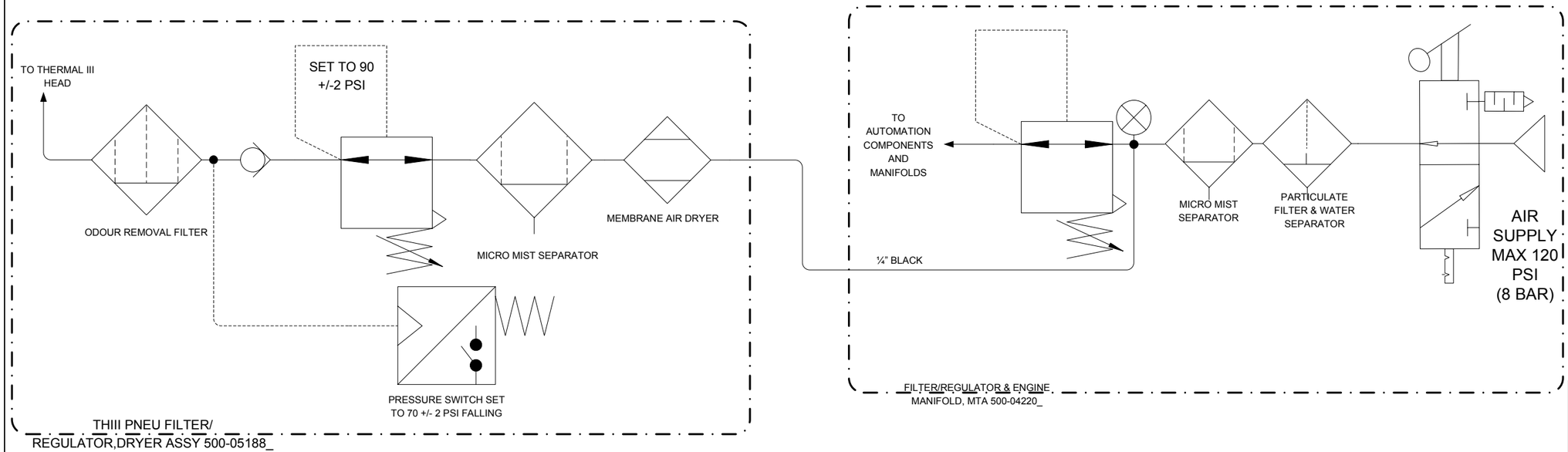
DOC, SCHEMATIC, PNEUMATIC,MTA ALTERNATE BASE DEVICE, CENTER BACK MOUNTED

DESIGNED BY	DRAWN BY			
DON MacKAY	DON MacKAY			
MILLIMETERS UNLESS SPECIFIED	DATE 30 APRIL 2007	SIZE B	SCALE NTS	
PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	3	19

Layout for Units with Side-mounted FRL



Layout for Units with Center-back-mounted FRL



Kodak

DOC, SCHEMATIC, PNEUMATIC
FILTER/REG,MTA
THERMAL III EQUIPPED

DESIGNED BY	DRAWN BY		
DON MacKAY	DON MacKAY		
MILLIMETERS UNLESS SPECIFIED	DATE 26 APRIL 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	4	19

ASSY,CYL,WIFFLE_LOCK
500-00555_
2 SETS

ASSY,CYL,VIRTUAL_CENTER_LOCK
500-00554_

ASSY,CYL,VIRTUAL_CENTER
500-00552_
3 SETS

ASSY,TILT CYLINDER
UNLOAD TABLE, MTA
500-00628_
2 SETS

ASSY,CYL,STOP
ACTUATOR
500-00556_

ASSY,CYL,PULLOUT
TABLE LOCK
500-01514_
2 SETS

ASSY,EJECTOR_CYLINDER,MSE_
500-03572_ OR 500-00447_

500-
00552_

BLUE ¼"

RED 1/4"

RED 5/16"

RED 5/32"

BLK 5/32"

RED ¼"

BLK ¼"

NOTE
1

"loadtable rightcups vac on"

"loadtable leftcups vac on"

"loadtable wiffle lock"

"loadtable centercups vac on

"loadtable centering unlock"

Loadtable centercups up/n/down

"ejector pusher1 down"

Loadtable leftrightcups up/n/down

"loadtable platestop up"

"loadtable pullout lock"

"ejector pusher2 down"

"loadtable plateangler on"

Unloadtable tilt/stop/untilt

LOAD TABLE MANIFOLD
500-00351_

Note: The three-position valves are to be mounted on the manifold with the "A" solenoid on the ported side of the manifold. All other solenoids are to be mounted in the conventional manner.

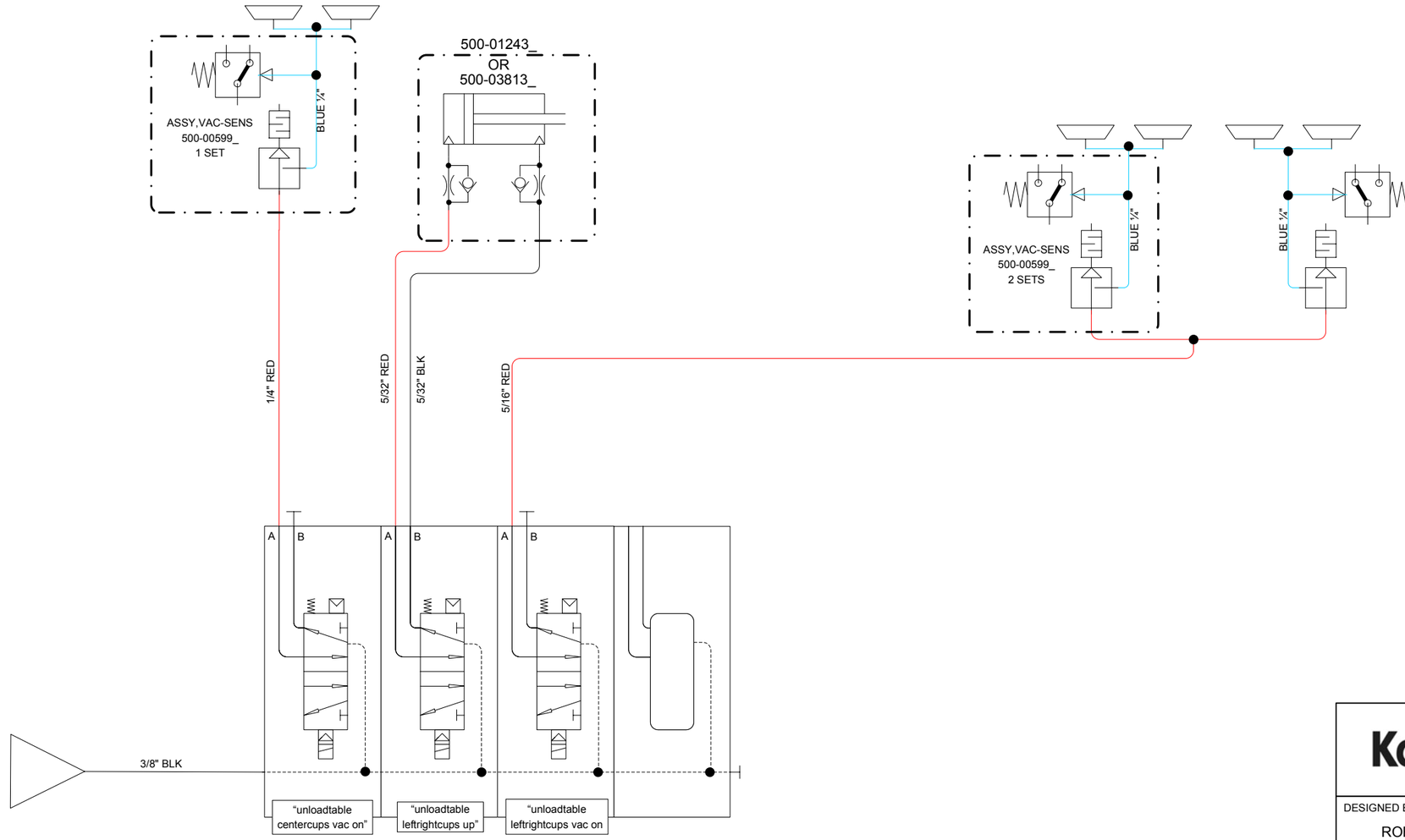
1 ON LEFT EJECT MACHINES THESE TUBES ARE SWITCHED AT THE CYLINDER SO THAT IT DEFAULTS EXTENDED

Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA LOAD TABLE

DESIGNED BY	DRAWN BY		
GORDON ANDREW	DON MacKAY		
MILLIMETERS UNLESS SPECIFIED	27 APRIL 2007	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	5	19



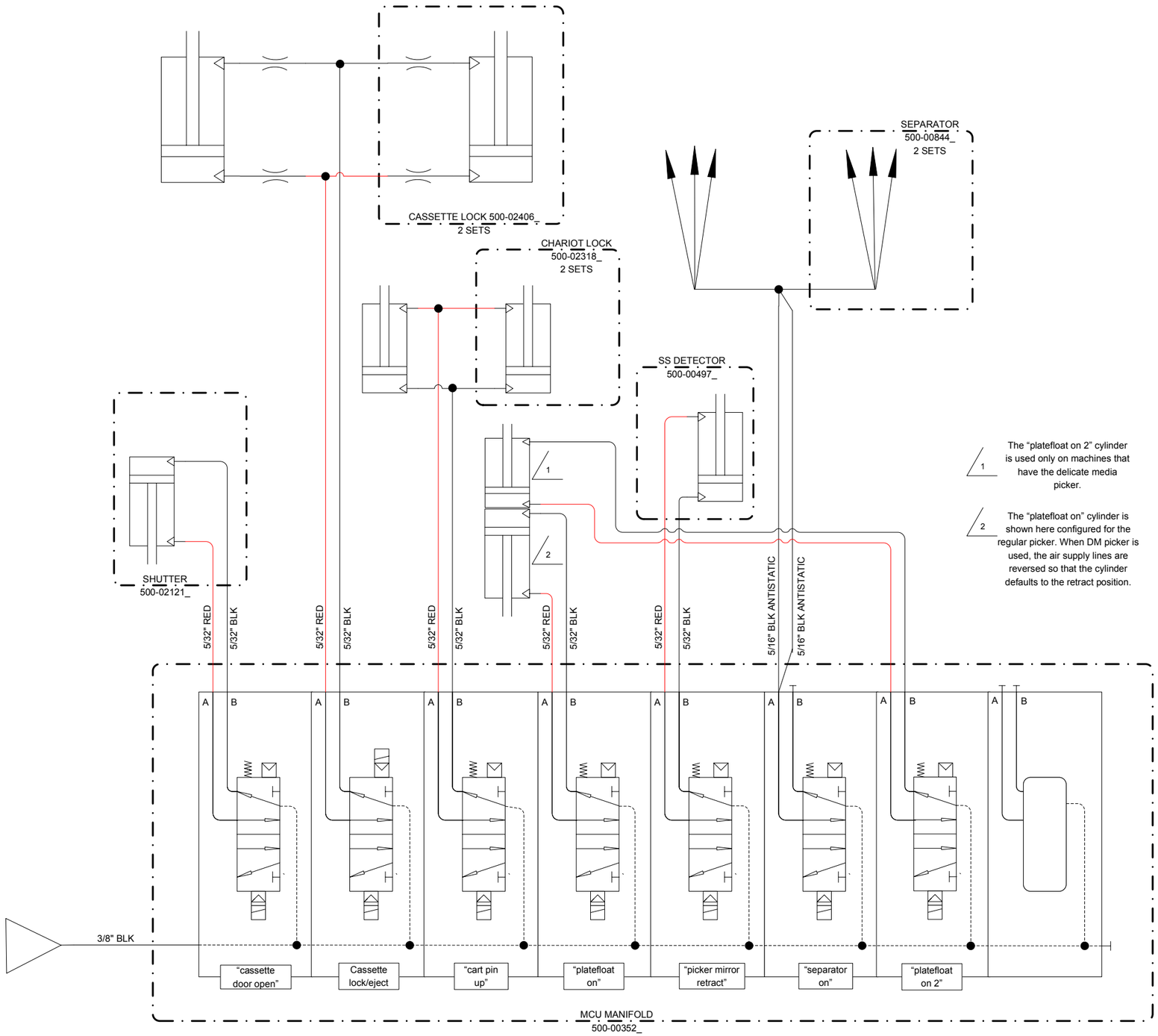
UNLOAD TABLE MANIFOLD
500-00349_

Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA UNLOAD TABLE

DESIGNED BY	DRAWN BY		
ROB BOUCHAL	DON MacKAY		
MILLIMETERS UNLESS SPECIFIED	4 MAY 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	6	19



1 The "platefloat on 2" cylinder is used only on machines that have the delicate media picker.

2 The "platefloat on" cylinder is shown here configured for the regular picker. When DM picker is used, the air supply lines are reversed so that the cylinder defaults to the retract position.

Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA MULTI CASSETTE UNIT

DESIGNED BY	DRAWN BY
JACOB GOFMAN	DON MacKAY

MILLIMETERS UNLESS SPECIFIED	4 MAY 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	7	19

VACUUM SENSOR

SS.EJECTOR VALVE
500-00476_

3/8" BLACK

3/8" BLACK

3/8" BLACK

VAC GEN

1/4" BLUE

1/2" BLACK

VAC GENERATOR
500-01158_

SLIPSHEET PICKER
50-1743_

FETCHER AIRJET

1/4" BLK

3MM RED

3MM BLK

500-01159_

500-00473_

3MM RED

3MM BLK

5/32" RED

5/32" BLK

VACUUM SENSOR

5/32" BLU

5/32" BLK

5/32" RED

5/32" BLK

5/32" RED

5/32" RED

5/16" BLK

5/32" RED

5/32" BLK

5/32" RED

5/16" BLK

3/8" BLACK

3/8" BLACK

5/16" BLK

5/16" BLK

1/4" BLK

PRESSURE SENSOR

"fetcher ss vac on"	"fetcher ss ocup up/down"	"fetcher ss icup up"	"fetcher ss wedgemaster down"	"fetcher cups up"	"fetcher airjet on"	"fetcher ss rejector on"	"fetcher vac on"

FETCHER MANIFOLD
50-2742_

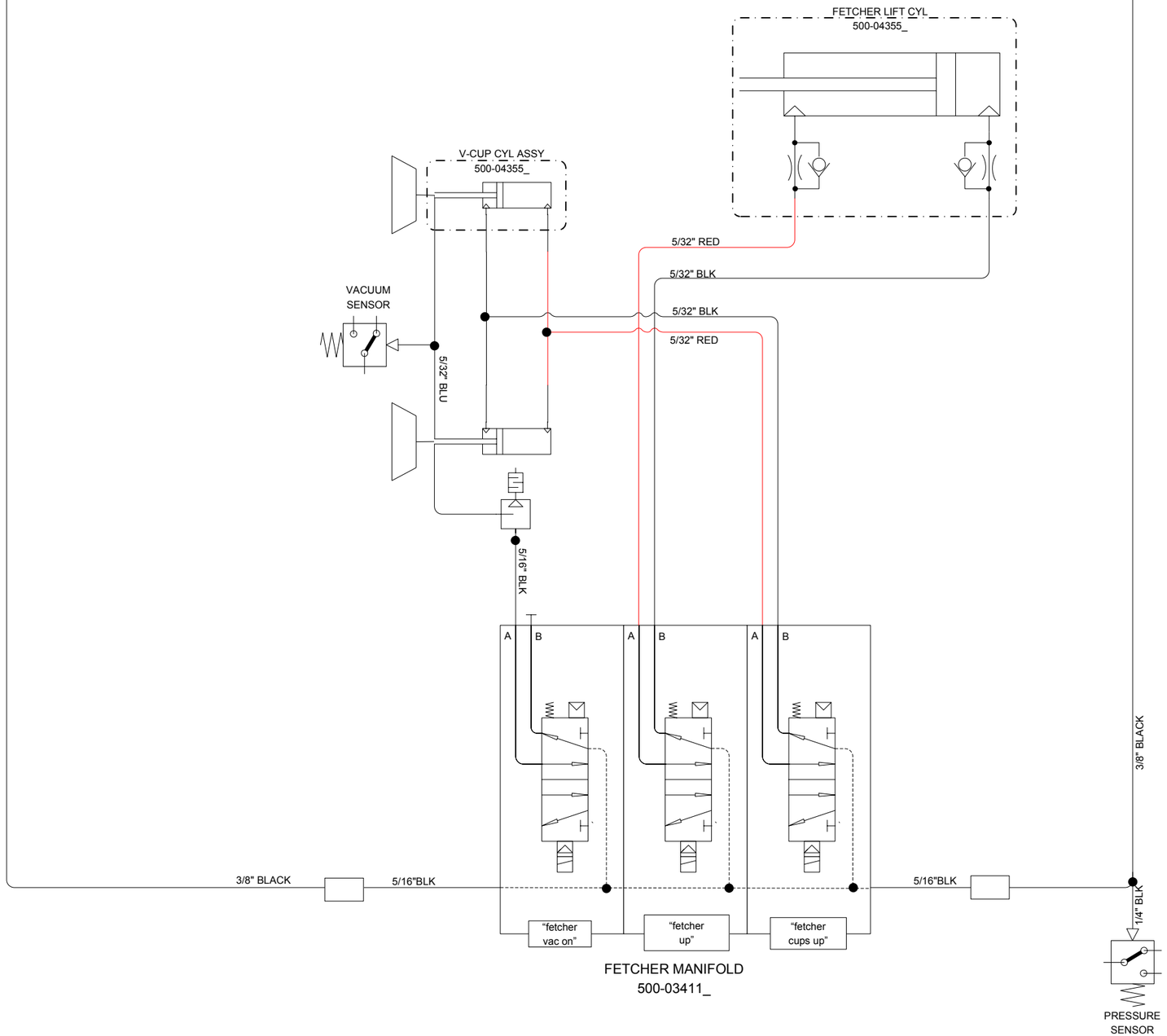
1 On the left-hand version of this manifold, the first and last valves and connections switch to the opposite ends of the manifold

Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA MCU FETCHER

DESIGNED BY	DRAWN BY		
JACOB GOFMAN	DON MacKAY		
MILLIMETERS UNLESS SPECIFIED	4 MAY 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G - A	SD	8	19	

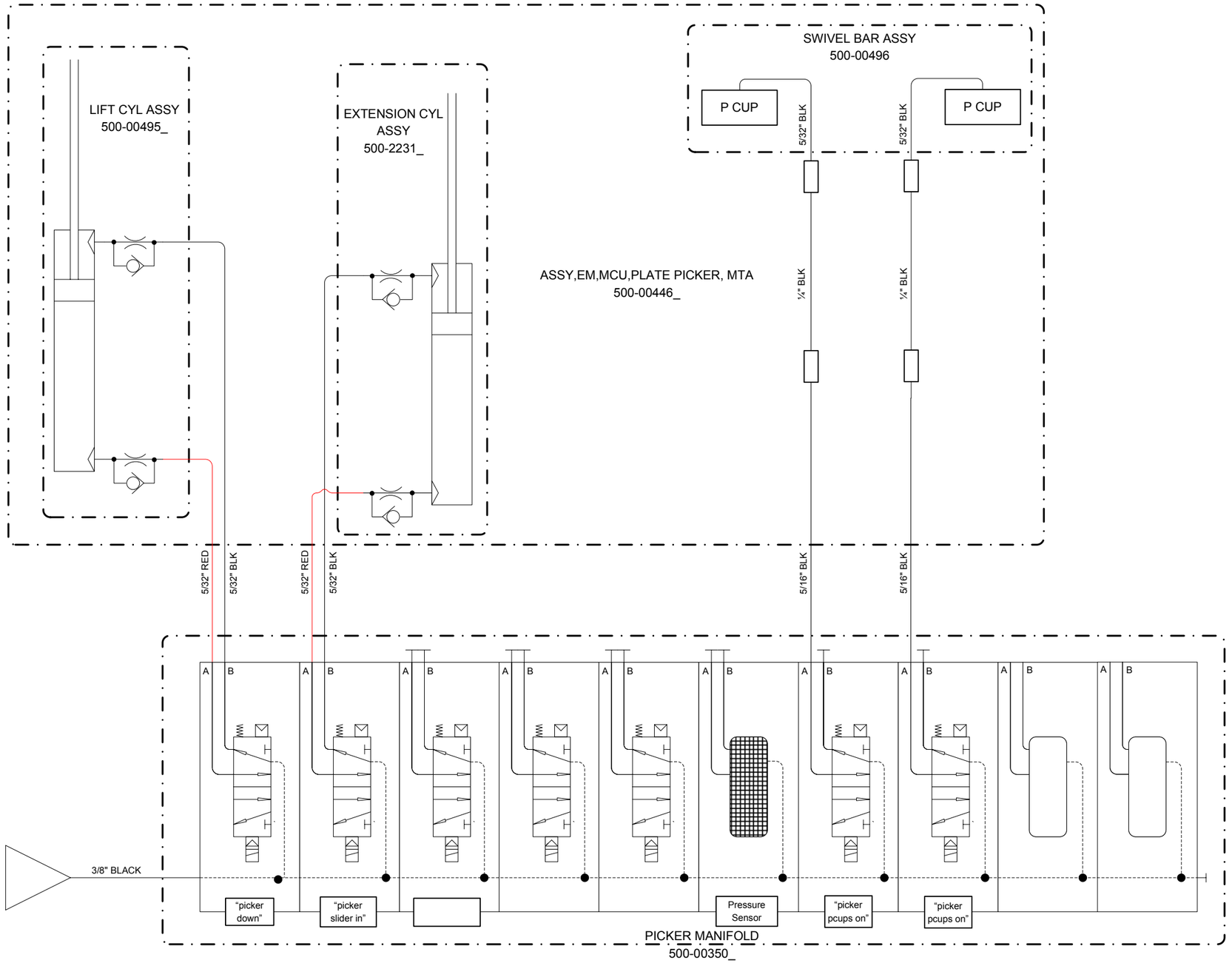


Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA MCU FETCHER WITH DM PICKER

DESIGNED BY	DRAWN BY		
NIELS BROERS	DON MacKAY		
MILLIMETERS UNLESS SPECIFIED	23 OCT 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G - A	SD	9	19	

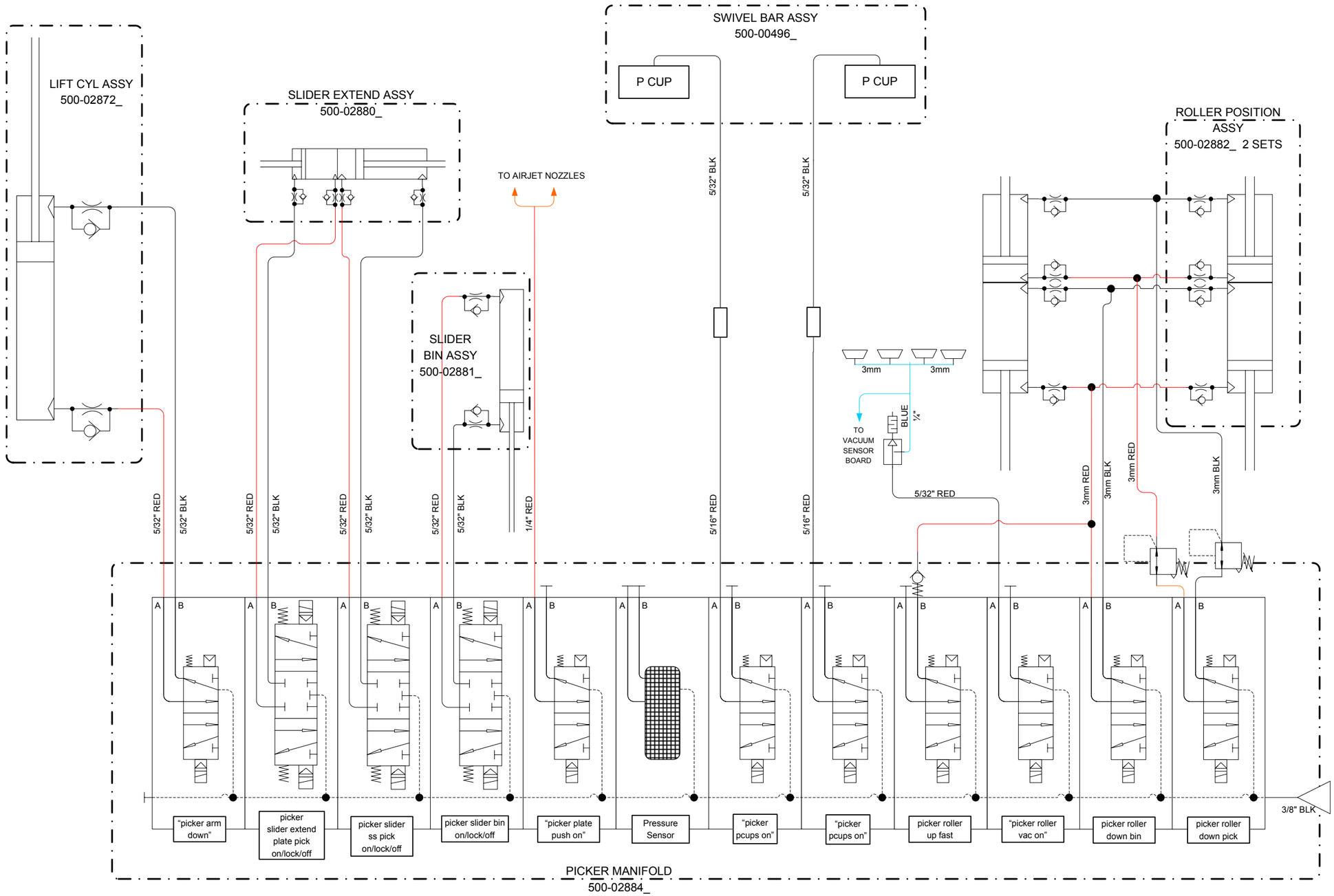


Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA MCU PICKER

DESIGNED BY	DRAWN BY		
JACOB GOFMAN	DON MacKAY		
MILLIMETERS UNLESS SPECIFIED	4 MAY 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	10	19



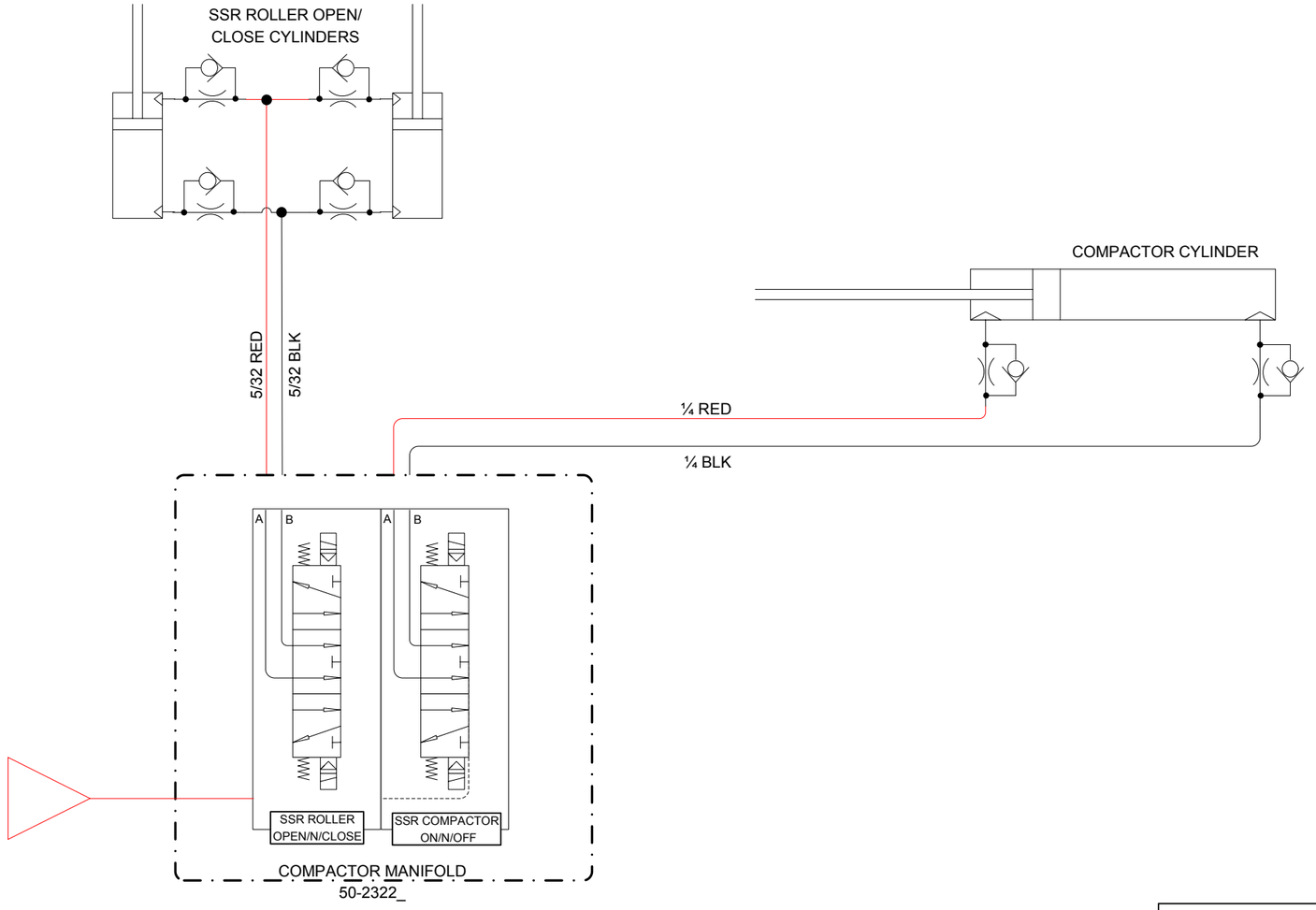
Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA MCU DM PICKER

DESIGNED BY	DRAWN BY
NIELS BROERS ALLA DRUBETSKY	DON MacKAY

MILLIMETERS UNLESS SPECIFIED	4 MAY 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	11	19



Kodak

DOC, SCHEMATIC,
PNEUMATIC, MTA MCU
SLIP SHEET REMOVAL

DESIGNED BY	DRAWN BY
JACOB GOFMAN	DON MacKAY

MILLIMETERS UNLESS SPECIFIED	4 MAY 2006	SIZE	SCALE
		B	NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	12	19

AIR AMPLIFIER

CHIP COLLECTION
500-03543_

1/4" RED

CHIP COLLECTION VALVE
500-03545_

ROTARY REGISTRATION PIN
500-03510_

NOTE: EVERY CUP IS FITTED WITH A 0.007" ORIFICE AT THE CONNECTION POINT

SUCTION CUP MANIFOLD
500-03511_

UP-DN CYLINDER
500-03512_

REGISTRATION BAR
500-03205_

5/16" RED

5/32" RED

5/32" BLK

PUSH CYL ASSY
500-03536_

PROPORTIONAL REGULATOR ASSY
500-03595_

1/4" RED

5/32" BLK

UP-DN TILTING ASSY
500-03615_

PUNCH MANIFOLD ASSY
500-03688_

Additional four station manifold may be added if more valves are required

A	B	
		Spare
		Spare
	B	"reg pin set 3 rotate"
	B	"reg pin set 2 rotate"
	B	"reg pin set 1 rotate"
		"debris collection on"
		"vac gen on"
		"reg bar float on/off"
		"vacuum cups up"
		"press reg away on/off"
		Spare
		"deflector up/ down"

B

Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA SINGLE PLATE PUNCH

DESIGNED BY	DRAWN BY		
ROB BOUCHAL	DON MacKAY		
MILLIMETERS UNLESS SPECIFIED	4 MAY 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	13	19

AIR AMPLIFIER

CHIP COLLECTION
500-03543_

1/4" RED

CHIP COLLECTION VALVE
500-03545_

ROTARY REGISTRATION PIN
500-03510_

NOTE: EVERY CUP IS FITTED WITH A 0.007" ORIFICE AT THE CONNECTION POINT

SUCTION CUP MANIFOLD
500-03511_

UP-DN CYLINDER
500-03512_

REGISTRATION BAR
500-03205_

5/16" RED

5/32" RED

5/32" BLK

PUSH CYL ASSY
500-03536_

PROPORTIONAL REGULATOR ASSY
500-03595_

KICKER CYL ASSY
500-04148_

UP-DN TILTING ASSY
500-03615_

PUNCH MANIFOLD ASSY
500-03688_

A

B

Spare

Spare

"reg pin set 3 rotate"

"reg pin set 2 rotate"

"reg pin set 1 rotate"

"debris collection on"

"vac gen on"

"reg bar float on/off"

"vacuum cups up"

"press reg away on/off"

"ejector kicker on"

"deflector up/ down"

Additional four station manifold may be added if more valves are required

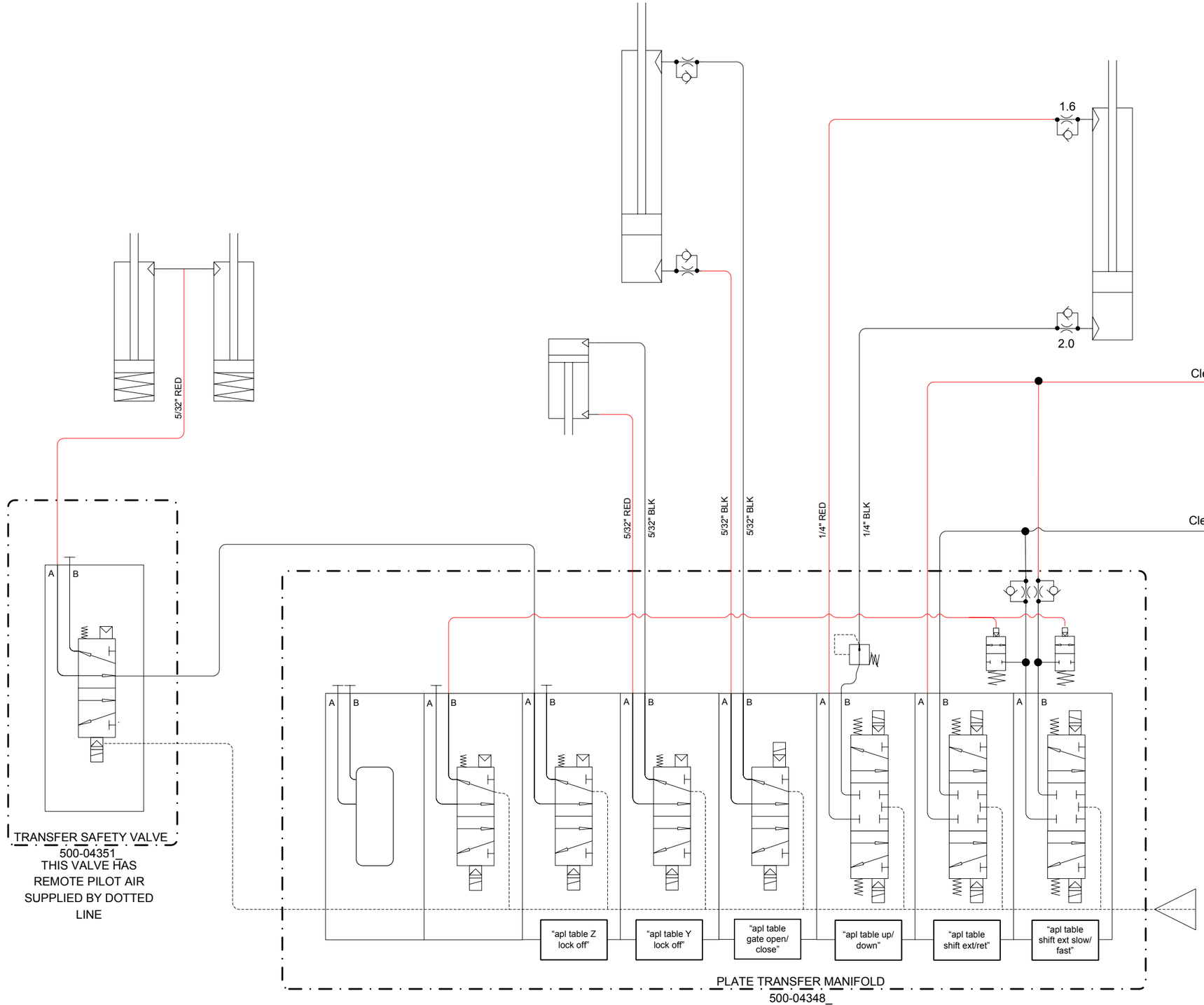
THIS IS NORMALLY A SPARE WITH A BLANKING PLATE

Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA
DUAL PLATE PUNCH

DESIGNED BY	DRAWN BY		
ROB BOUCHAL	DON MacKAY		
MILLIMETERS UNLESS SPECIFIED	4 MAY 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	14	19



Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA APL

DESIGNED BY	DRAWN BY
JACOB GOFMAN	DON MacKAY

MILLIMETERS UNLESS SPECIFIED	23 0CT 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	15	19

FLOAT BAR

FLOAT BAR
EXT/RET

GANTRY TABLE LOCK
500-04235_

GANTRY BRAKE
500-04234_

FLOAT BAR
PLENUM-SLIDER
EXT/RET
500-05106_

BACKSTOP ARMS
500-05103_

3mm RED
3mm BLK
3mm RED
3mm BLK
3mm RED
3mm BLK

5/32" RED
5/32" BLK
3/8" BLK
5/32" RED
5/32" BLK
5/32" RED
5/32" BLK

PICKER GANTRY
GENINE BOARD
PRESSURE SENSOR

1/4" BLK

1/2" BLK
3/8" BLK

3/8" BLK
3/8" BLK

APL PUSHER
500-04442_

A B A B A B A B A B A B A B

Spare
"apl platestop left ext/ret"
"apl platestop mid ext/ret"
"apl platestop right ext/ret"
"apl float on/off"
"apl float air on/off"
"apl gantry table lock on/off"
"apl gantry brake on/off"

PICKER GANTRY MANIFOLD
500-04356_

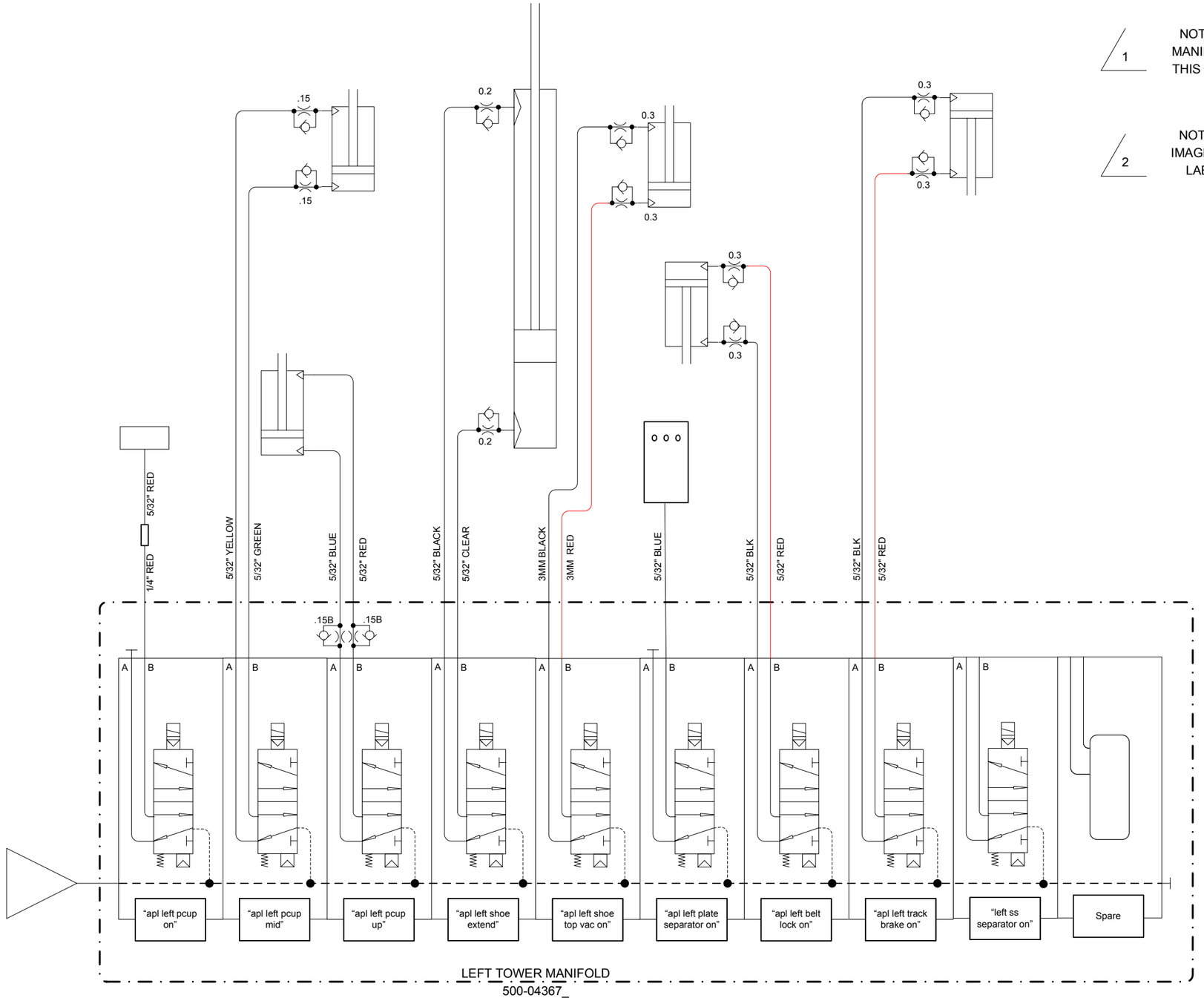
Kodak

DOC, SCHEMATIC,
PNEUMATIC, MTA
APL PICKER GANTRY

DESIGNED BY	DRAWN BY
NIELS BROERS	DON MacKAY

MILLIMETERS UNLESS SPECIFIED	23 0CT 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	16	19



LEFT TOWER MANIFOLD
500-04367_

1 NOTE THAT ALL OF THESE VALVES ARE MOUNTED TO THE MANIFOLD "BACKWARDS" TO THE CONVENTIONAL POSITION. THIS MEANS THAT "A" IS THE DEFAULT PRESSURIZED PORT.

2 NOTE THAT THE SCHEMATIC FOR THE RIGHT TOWER IS THE MIRROR IMAGE OF THIS, EXCEPT TO REPLACE THE WORD "LEFT" ON THE VALVE LABELS WITH "RIGHT". THE RIGHT TOWER MANIFOLD IS 500-04366_

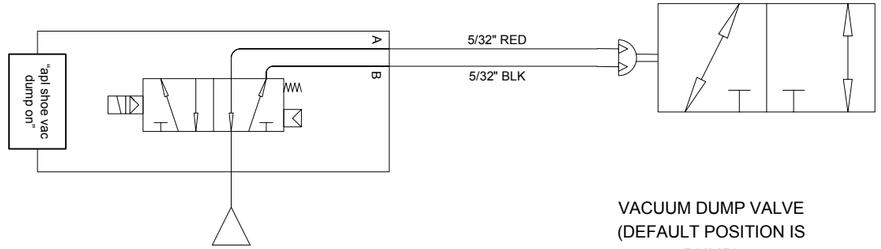
Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA APL TOWERS

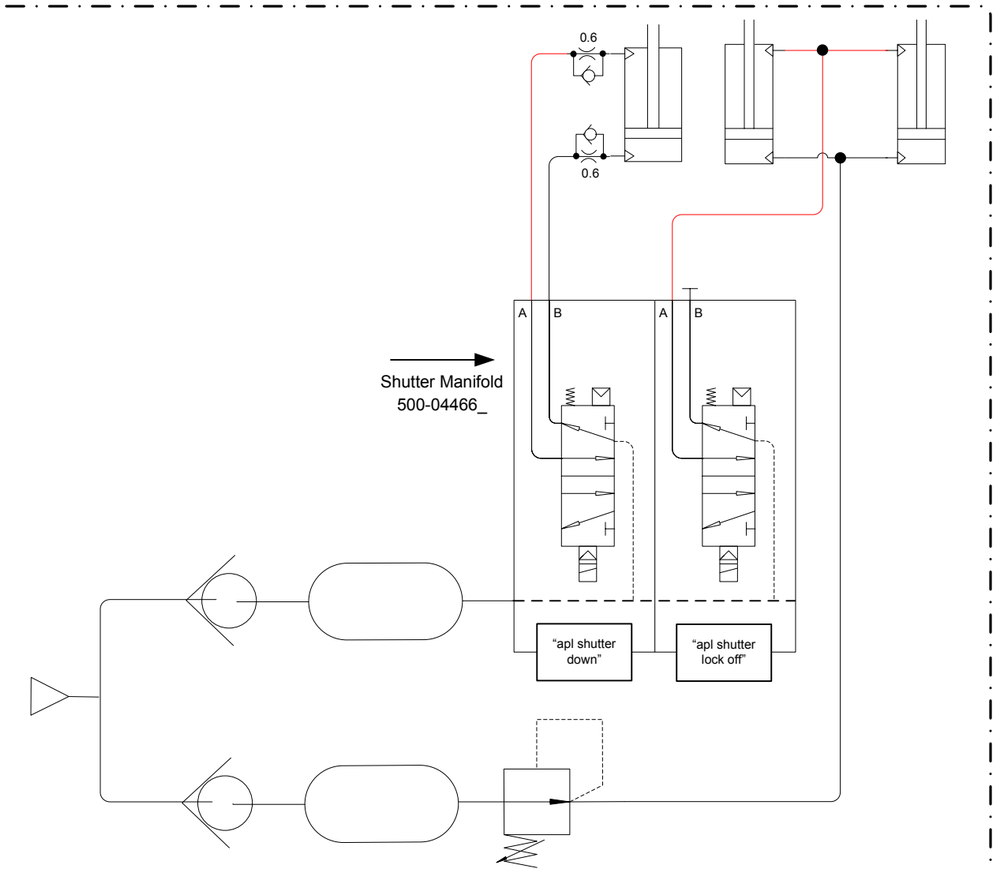
DESIGNED BY	DRAWN BY		
JON DAHLGREN	DON MacKAY		
MILLIMETERS UNLESS SPECIFIED	23 OCT 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	17	19

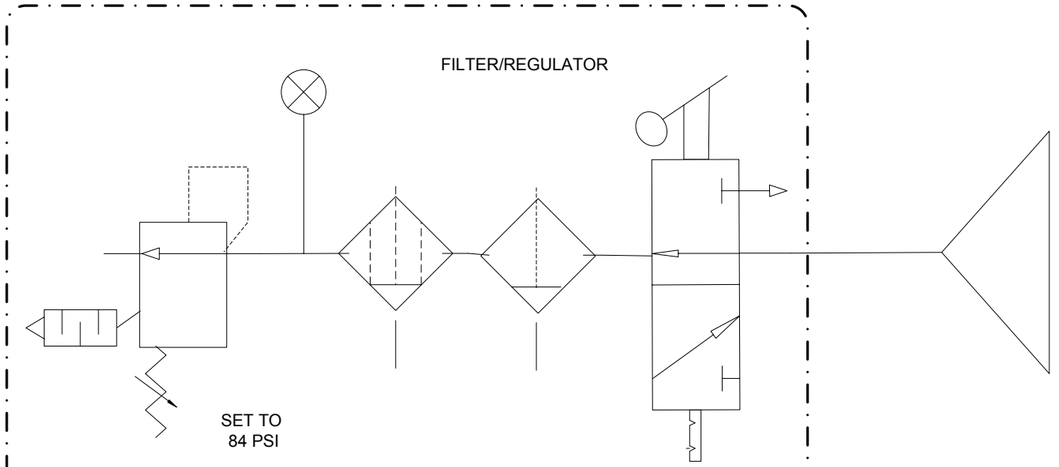
APL BLOWER BOX



VACUUM DUMP VALVE
(DEFAULT POSITION IS
DUMP)



FILTER/REGULATOR



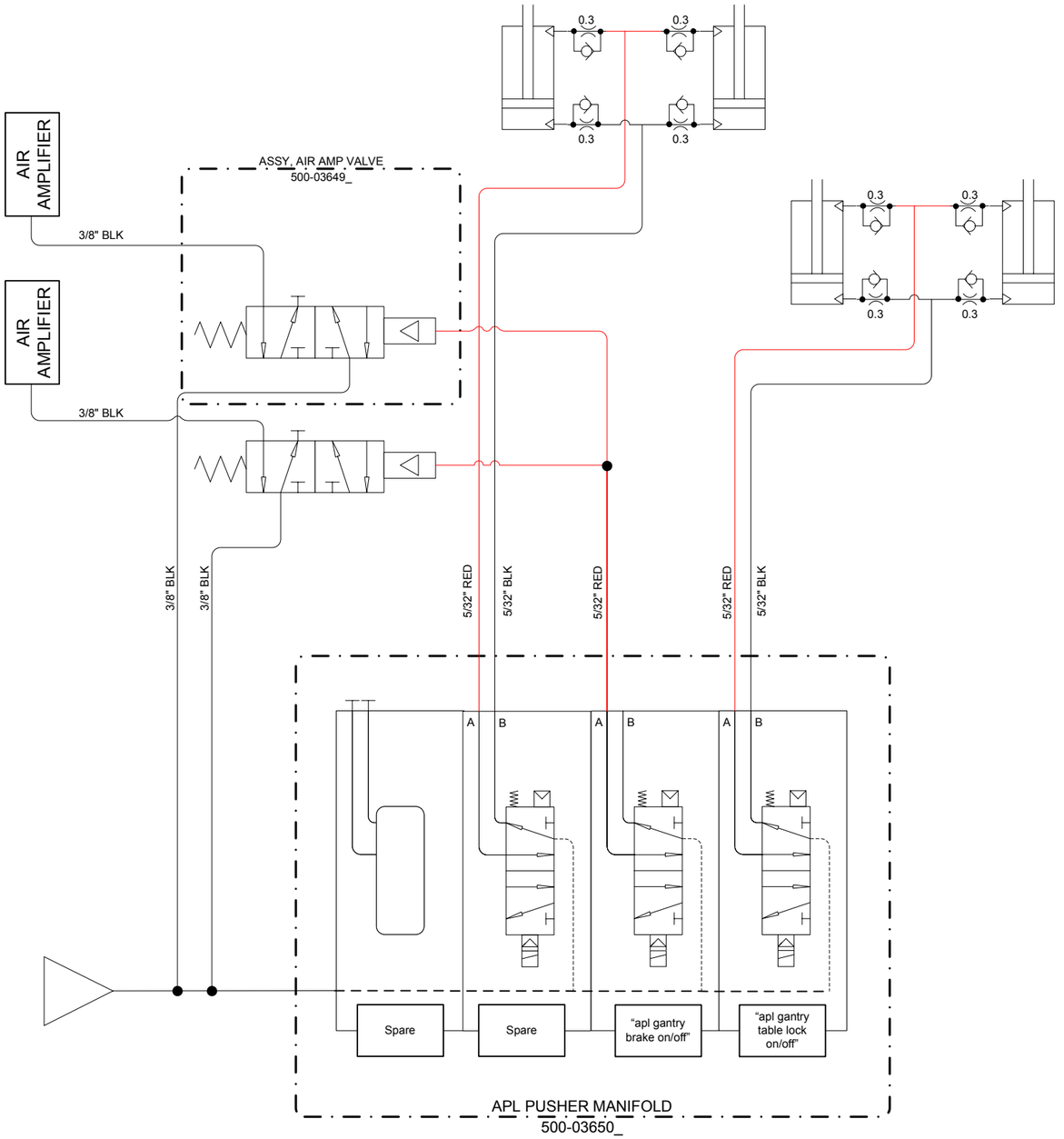
SET TO
84 PSI

Kodak

DOC, SCHEMATIC,
PNEUMATIC, MTA
SHUTTER & BLOWER
APL

DESIGNED BY	DRAWN BY		
BRANDON RIGIO	DON MacKAY		
MILLIMETERS UNLESS SPECIFIED	23 OCT 2006	SIZE B	SCALE NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	18	19



Kodak

DOC, SCHEMATIC, PNEUMATIC, MTA PUSHER APL

DESIGNED BY	DRAWN BY
JEFF HOGEWONING	DON MacKAY

MILLIMETERS UNLESS SPECIFIED	23 OCT 2006	SIZE	SCALE
		B	NTS

PART NO.	REV	DOC	SHEET	OF
718 - 00023G	- A	SD	19	19