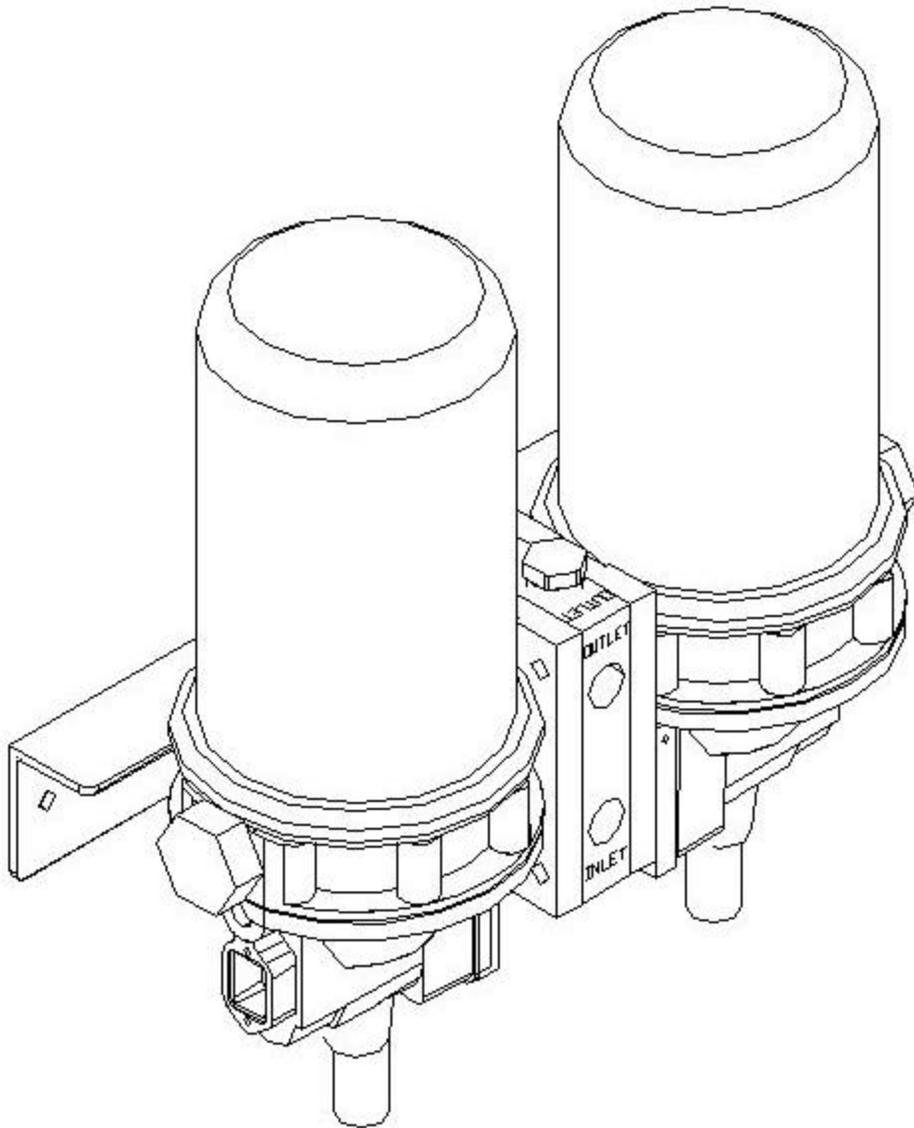


DRY AIR SYSTEMS, INC.

2655 Metro Boulevard
Maryland Heights, Missouri 63043
(314) 344-1114
fax (314) 344-0677



HD SERIES DRIERS

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WHY AN AIR DRYER

Compressor HP	Total Inlet Cu. Ft.	Gallons of Water
25	72,000	13.6
50	144,000	27.2
100	288,000	54.3
250	720,000	135.8
500	1,440,000	271.7
1000	2,880,000	543.4
2000	5,760,000	1,086.60

All air systems trap and contain water moisture and contaminants. The chart illustrates water accumulation during a 12-hour period. Moisture in compressed air systems unchecked harms or destroys delicate pneumatic controls. Water and contamination shortens their life expectancy, reduces reservoir capacity and affects compressor duty cycles.

Dry Air Systems offers air drying systems that improve overall system reliability and its related pneumatic controls and devices. The HD series of air dryers are designed for continuous desiccant regeneration with less than 7% of air required for regeneration. Operational cost related to the air drying systems is less than a 75-watt light bulb.

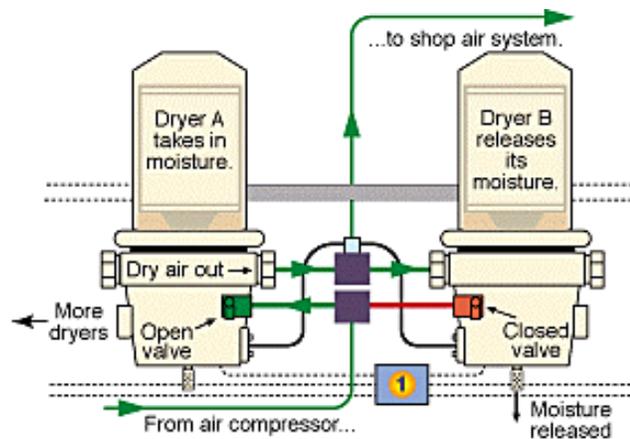
These drying systems offer designs with:

- Ease of installation
- Expansion capabilities
- Particulate filtration
- Pressure dew point of -40 Fahrenheit

WHAT IS A DESICCANT AIR DRYER

Desiccant Air Dryer General Description

The MVP series of air dryers are models designed to mount vertically after the compressor air reservoir. HD air dryer systems receive warm compressed air that cools, dry and filter contaminants from compressed air before distribution to air systems. Their designs reduce the build up of dirt and moisture protecting complete air systems, pneumatic tools and spray paint booths.



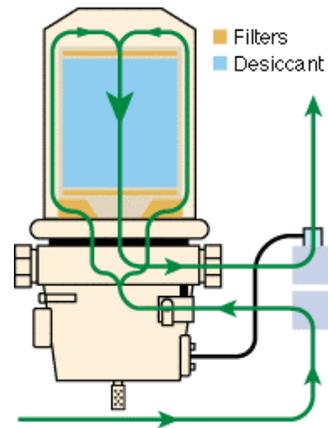
HD air systems adapt to air compressors from 3HP up to multiple air compressor systems. Each dryer within a specific system incorporates four pounds of desiccant. A precise continuous regeneration cycle is accomplished without disrupting airflow ensuring a constant cleansing of both the desiccant drying bed and internal filtration.

All HD air dryers are constructed of a lightweight aluminum and steel design housing a unique spin-off cartridge. Below the cartridge are four ports: 1) inlet, 2) outlet, 3) control and 4) purge port. Each port has a specific function. The inlet port receives contaminated air from the air compressor. Outlet port directs clean dry air to the air system with a dual function of controlling the regeneration flow rate. Control port receives an air signal from either a MLT (Micro Logic Timer) allowing for the expulsion of water and contaminants through the dryers purge port.

Theory of Desiccant Operation

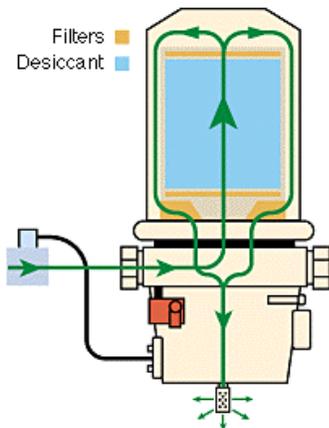
Charge Cycle

Compressed air enters the air dryer through the inlet port. As the warm air enters the dryer system the air expands; oil and water vapor condense, and accumulate in the sump. The air is directed into a desiccant cartridge passing through a series of internal filters and a cloth bag removing contaminants. Air vapor continues to condense as air travels to the desiccant bed that holds water under pressure. The clean dry air is then directed to the air system through the outlet port.



Regeneration Cycle

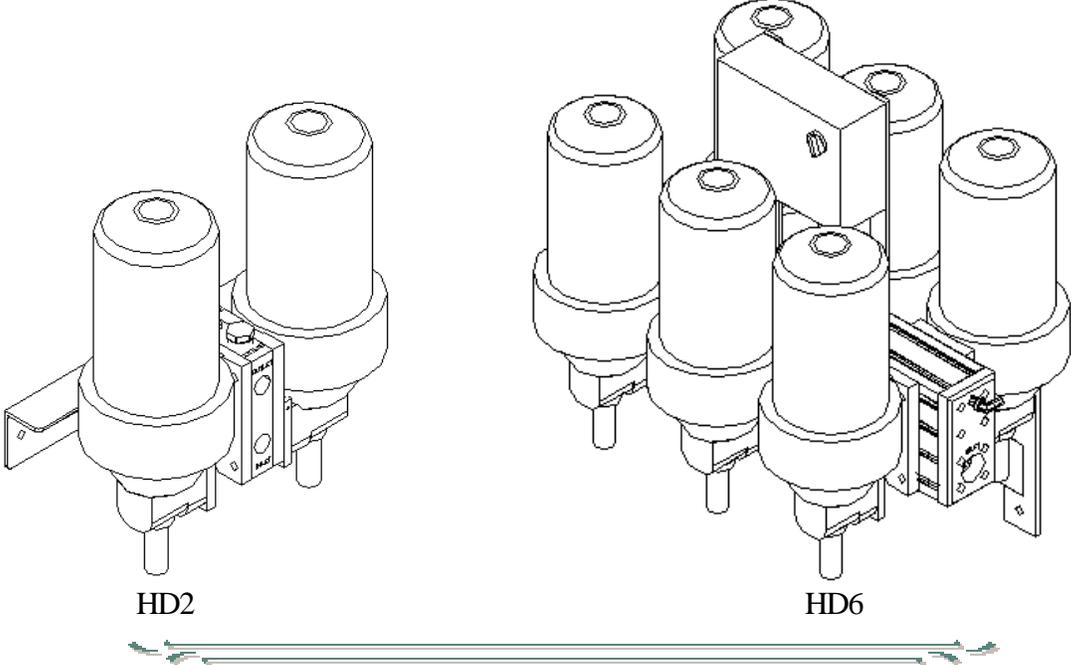
Dryers systematically regenerate when control signals are



received from either the MLT by temporarily removing a single dryer off line to begin the regeneration process. An air pressure signal received from the MLT opens the purge valve and closes the air dryer's inlet and regeneration valves. This action causes a sudden discharge of air through the exhaust port of the dryer. These valves react to air pressure when an air dryer purge port opens. With the inlet valve closed, the regeneration valve is in position to control a timed pressurized back flow of filtered dried air that reenters the desiccant cartridge. During the regeneration cycle, the desiccant bed is depressurized allowing the removal of accumulated moisture from desiccant bed, back flushing and cleaning filters expelling contaminants out the dryers purge port. This completes the regeneration cycle.

MLT's with their specified time intervals close the air dryer purge valve that reacts to the evacuation of air pressure through the exhaust (EXH) port-controlling device.

Dry Air Systems, Inc. offers air drying systems to meet the unique requirements from complete plant operation to single units for small or isolated application within an air system.



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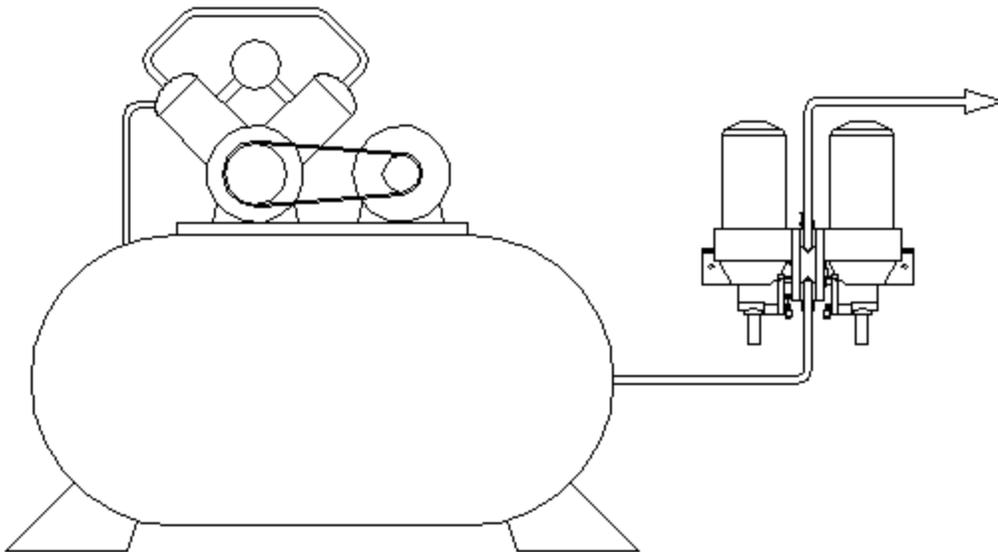
INSTALLATION INSTRUCTIONS

HD2 (10 H.P compressors or less)

1. Inspect air compressor lines and fittings for air leaks.
 - 1.1. Repair any air leaks. Replace any damaged lines or components
2. Drain all air system pressure
3. Locate mounting on wall and mark holes
 - 3.1. **Note:** Desiccant canisters may be removed for easier installation
 - 3.2. **Note:** Dryers are installed in the vertical position only (canisters up)
4. Mount air dryer system. Install mounting hardware as necessary
5. Connect air line from compressor reservoir to manifold inlet (bottom) of dryer system.
 - 5.1. **It is recommended to install a by-pass system for ease of servicing air dryer system**
 - 5.2. **Note:** 2 3/4" npt ports are available for both inlet and outlet. Factory installed plugs may be removed from top and bottom of manifold and be replaced onto front of manifold to facilitate better pipe/hose routing.
6. Connect air line from air dryer manifold (top) to air system
7. Plug MLT timer (6009X-010) into grounded and surge protected 110-volt receptacle
8. Restart air compressor and check for leaks

Installation Requirements

Dryer system requires at least 80 psi to operate MLT valve
Thread sealant must be used on all air connections
Dryers are installed in a vertical position only (Canisters up)
Hoses may be attached to exhaust ports to direct water drainage
Dryers cycle every 4 minutes

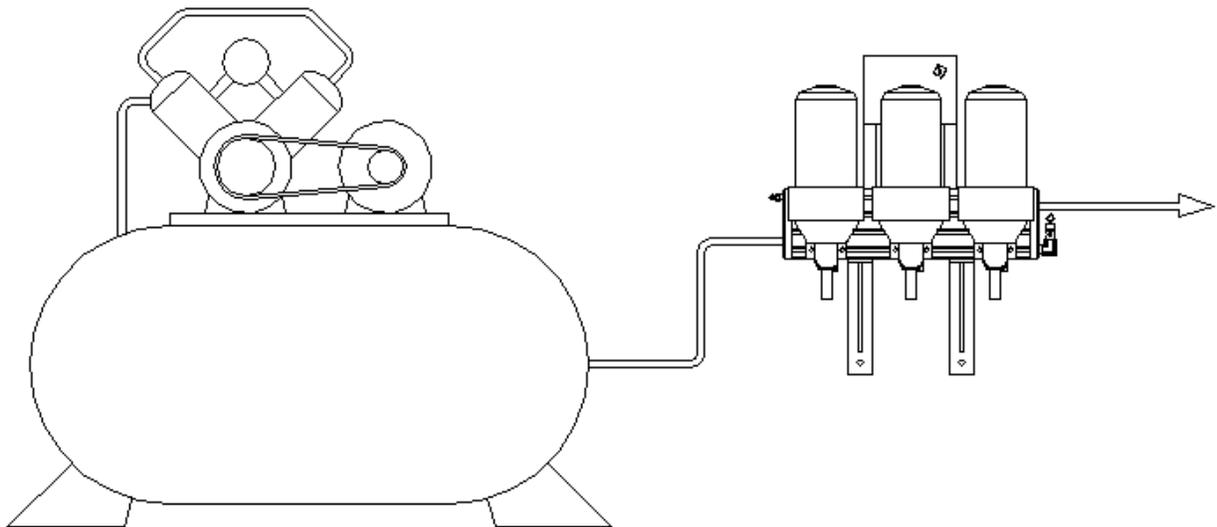


HD3-HD?? (above 10 H.P compressor)

1. Inspect air compressor lines and fittings for air leaks.
 - 1.1. Repair any air leaks. Replace any damaged lines or components
2. Drain all air system pressure
3. Locate mounting on floor or wall and mark holes
 - 3.1. **Note:** Desiccant canisters may be removed for easier installation
 - 3.2. **Note:** Limited adjustment exists left to right by loosening 5/16 SHCS on drier manifold
 - 3.3. **Note:** Brackets are shipped in floor mount position but may be moved to bolt to bottom of manifold (as shown below) if wall mount is desirable
 - 3.4. **Note:** Dryers are installed in the vertical position only (canisters up)
4. Mount air dryer system. Install mounting hardware as necessary
5. Connect air line from compressor reservoir to manifold inlet (bottom)
 - 5.1. **It is recommended to install a by-pass system for ease of servicing air dryer system**
6. Connect air line from air dryer manifold outlet (top)
7. Hook up electrical power
 - 7.1. If unit is supplied with a standard control box, there will be a wall mount dc transformer which needs to be both plugged into the wall as well as into 5/16 dia female plug in bottom of control box
 - 7.2. If unit is shipped with an industrial power supply, a hole must be drilled into the control box and 120vac brought to L1 & L2 terminal points – use adequate protection from potential live electrical circuits!
8. Restart air compressor and check for leaks

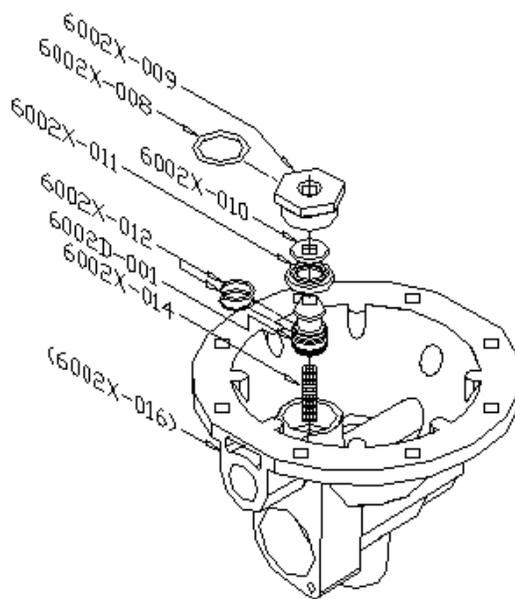
Installation Requirements

Dryer system requires at least 80 psi to operate solenoid valves
Thread sealant must be used on all air connections
Dryers are installed in a vertical position only (Canisters up)
Hoses may be attached to exhaust ports to direct water drainage
Dryers cycle every 40 seconds



REPLACEMENT SERVICE COMPONENTS PROCEDURE

6002K-002 Inlet Valve



Installation Precautions

1. Stop compressor when working on air systems. Never connect or disconnect a hose or line containing air pressure. Never remove a component or a pipe plug unless you are certain all system air pressure has been exhausted.
2. Always wear safety glasses when working with air pressure. Never look directly into air dryer ports.
3. Never exceed recommended working air pressure.
4. Never attempt to disassemble an air dryer until you have read and understood all recommended procedures. Use only proper tools and observe all precautions pertaining to the use of those tools.

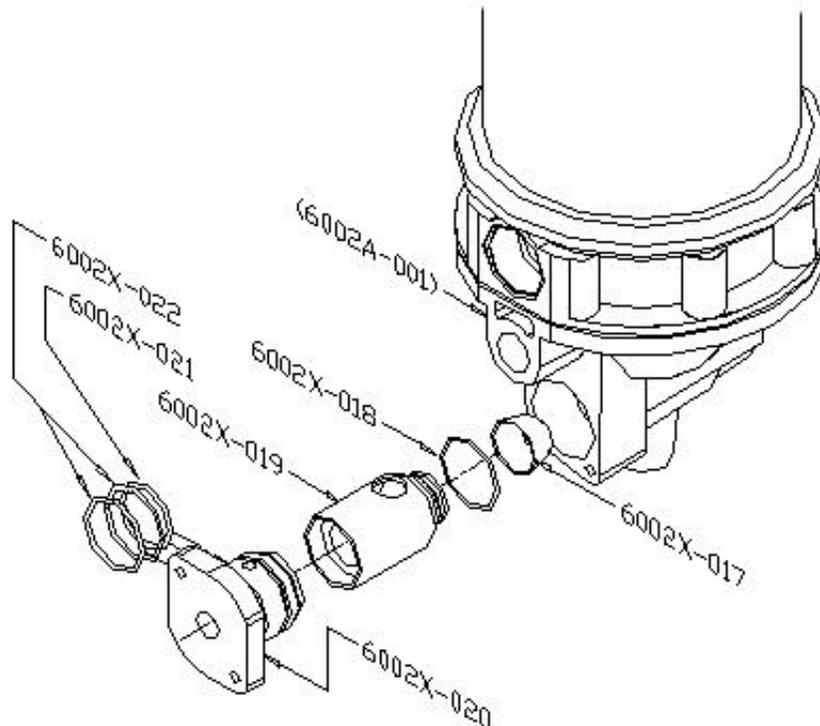
**CAUTION: AIR DRYERS EXHAUST AT HIGH PRESSURE.
PROTECTIVE EYEWEAR SHOULD BE WORN WHILE SERVICING.**

1. Exhaust/drain air system to zero PSI. If air dryer by-pass was installed, open/close valves as necessary and drain air dryer unit by removing signal line from dryer outlet manifold (1/4" line)
2. Disconnect purge valve (PV-1) 1/4" air line from dryer to be serviced.
3. Remove air dryer (6002A-001) from manifold by removing 4 5/16-18 SHCS.
4. Remove air dryer manifold mount plate (6003D-003) by removing 4 #10-32 SHCS.
5. Remove 8 bolts from bottom cap assembly, remove cap and discard gasket.
6. Remove inlet valve nut, valve stop, valve, spring and discard.
7. Clean cavity area thoroughly.
8. Generously coat (with 6002X-005 silicone grease only) the 2 (small) o-rings surfaces and install on piston. Carefully install valve and spring in cavity with tapered side up.

9. Place valve stop on top of valve with concave side down.
10. Lube large o-ring and place on nut. Install flat seal into nut.
11. Install nut and tighten to 50 ft. lb.
12. Place gasket on bottom cap. Locate bottom cap with inlet port directly below outlet port.
13. Re-assemble unit following steps (in reverse) 5 thru 1.



6002K-001 Purge Valve



Installation Precautions

1. Stop compressor when working on air systems. Never connect or disconnect a hose or line containing air pressure. Never remove a component or a pipe plug unless you are certain all system air pressure has been exhausted.
2. Always wear safety glasses when working with air pressure. Never look directly into air dryer ports.
3. Never exceed recommended working air pressure.
4. Never attempt to disassemble an air dryer until you have read and understood all recommended procedures. Use only proper tools and observe all precautions pertaining to the use of those tools.

**CAUTION: AIR DRYERS EXHAUST AT HIGH PRESSURE.
PROTECTIVE EYEWEAR SHOULD BE WORN WHILE SERVICING.**

1. Exhaust/drain air system to zero PSI. If air dryer by-pass was installed, open/close valves as necessary and drain air dryer unit by removing signal line from dryer outlet manifold (1/4" line)
2. Disconnect purge valve (PV-1) 1/4" air line from dryer to be serviced.
3. Remove air dryer (6002A-001) from manifold by removing 4 5/16-18 SHCS.
4. Remove air dryer manifold mount plate (6003D-003) by removing 4 #10-32 SHCS.
5. Remove 2 1/4-20 SHCS from adapter (6003D-002).
6. Remove adapter & purge valve operator /seal retainer (6002X-020).
7. Remove seal retainer, purge valve assembly, 4 O-rings and screen. Check to be sure all components are removed and discarded.
8. Clean purge valve cavity.

NOTE: Excessive accumulation of oil in the air dryer purge valve indicates compressor may require service. Disassemble entire air dryer and check for blockage within the valve cavities, safety valve and bottom cap cavity. Clean as necessary.

6. Remove all (3) old o-rings from center portion of bolt-on seal retainer. Apply a light coating of (6003X-005) grease on first two new o-rings (1.362 x 103). Install new o-rings on seal retainer. Apply a light coating of grease on the other new O-ring (1.174 x.103). Install on end of seal retainer

NOTE: When removing old o-rings be careful not to damage O-ring seats.

7. Apply a light coating of grease to the threads of seal 2 seal retainer bolts.
8. Install new filter screen in purge valve cavity (closed end first).
9. Apply a light coating of (6003X-005) grease to O-ring seat on new purge valve end (1/2 ball end) and install new O-ring (1.364 x.070).
10. Align valve assembly exhaust port with bottom cap exhaust port and install valve assembly.

NOTE: Be careful not to dislodge O-ring during valve installation.

11. Reassemble by following steps (in reverse) 6 thru 1.



6002K-003 Desiccant Canister

**CAUTION: DO NOT OVER TIGHTEN CARTRIDGE.
HAND TIGHTEN UNTIL GASKET CONTACTS ADAPTOR
PLATE AND TURN ADDITIONAL 1/2 TURN ONLY!**

Installation Precautions

1. Stop compressor when working on air systems. Never connect or disconnect a hose or line containing air pressure. Never remove a component or a pipe plug unless you are certain all system air pressure has been exhausted.
2. Always wear safety glasses when working with air pressure. Never look directly into air dryer ports.
3. Never exceed recommended working air pressure.
4. Never attempt to disassemble an air dryer until you have read and understood all recommended procedures. Use only proper tools and observe all precautions pertaining to the use of those tools.

**CAUTION: AIR DRYERS EXHAUST AT HIGH PRESSURE.
PROTECTIVE EYEWEAR SHOULD BE WORN WHILE SERVICING.**

Service Instructions

1. Whenever servicing the air dryer, clean and inspect entire unit for any external damage.
2. Remove old cartridge (turn counter-clockwise).
3. Clean dirt/oil from top surface of adaptor plate and threaded stud
4. Remove old O-ring from threaded adaptor.

NOTE: Excessive accumulation of oil in the air dryer or air dryer cartridge indicates the compressor may require service. Disassemble entire unit and check for blockage within the valve cavities, safety valve and bottom cap cavity. Drain, clean and replace worn components as necessary.

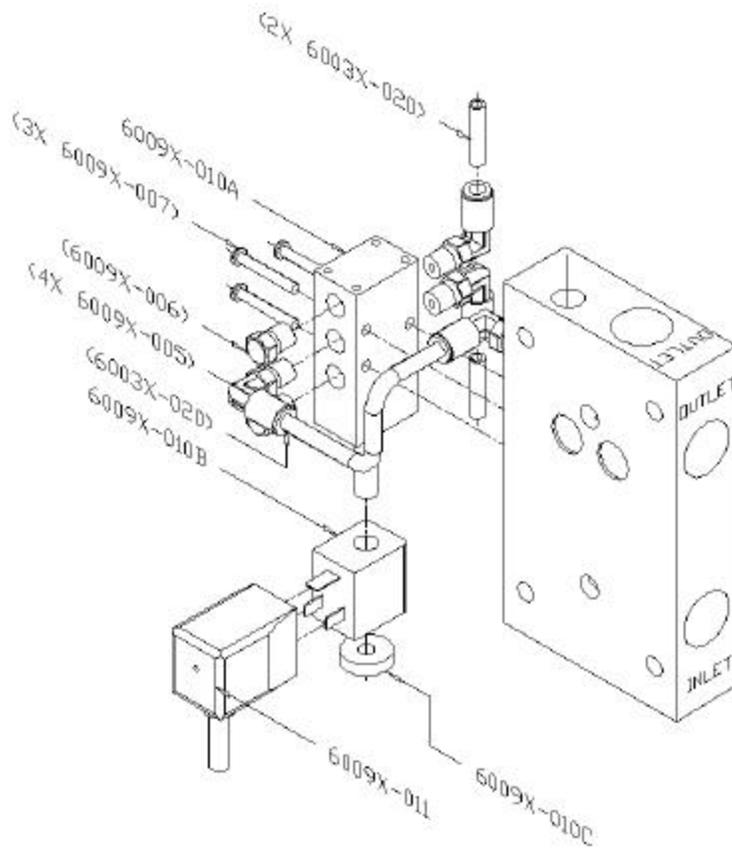
5. Lubricate new O-ring and install on threaded adaptor.
6. Lubricate the gasket on the new desiccant cartridge.
7. Thread new cartridge onto adaptor (turn clockwise)

DO NOT CROSS THREAD

NOTE: When gasket contacts adaptor plate, tighten 1/2 turn. **DO NOT OVER TIGHTEN** or cartridge could be extremely difficult to remove.



6009X-010 Control Valve (HD2 only)



Installation Precautions

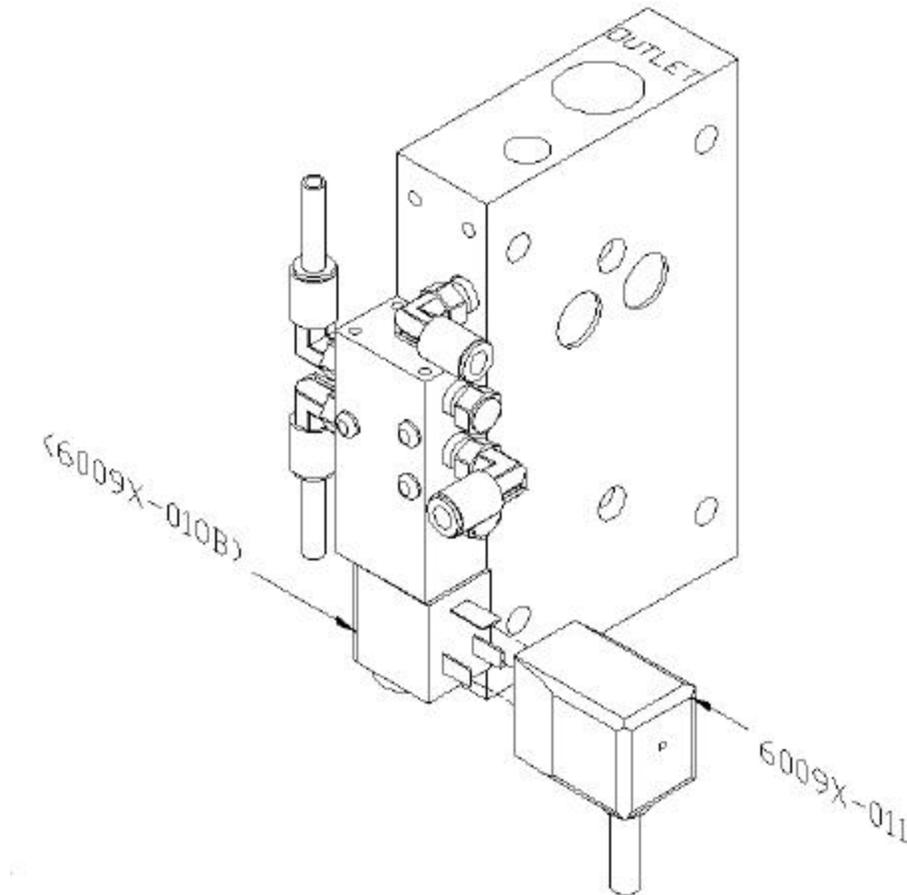
1. Stop compressor when working on air systems. Never connect or disconnect a hose or line containing air pressure. Never remove a component or a pipe plug unless you are certain all system air pressure has been exhausted.
2. Always wear safety glasses when working with air pressure. Never look directly into air dryer ports.
3. Never exceed recommended working air pressure.
4. Never attempt to disassemble an air dryer until you have read and understood all recommended procedures. Use only proper tools and observe all precautions pertaining to the use of those tools.

**CAUTION: AIR DRYERS EXHAUST AT HIGH PRESSURE.
PROTECTIVE EYEWEAR SHOULD BE WORN WHILE SERVICING.**

1. Exhaust/drain air system to zero PSI. If air dryer by-pass was installed, open/close valves as necessary and drain air dryer unit by removing signal line from dryer outlet manifold (1/4" line).
2. Remove 1/4" air line from 3 locations at 6009X-010 control valve 6009X-005 tube fittings.
3. Remove 6009X-010C retaining nut from control valve and drop solenoid/timer from unit. Remove timer from solenoid with 1 screw.
4. Remove 6009X-007 #8-32 screws at 3 locations connecting control valve to HD2 manifold body and drop valve.

5. Remove fittings from control valve, verify serviceability of fittings and exhaust mufflers. Replace as necessary. It is recommended that (2) 6009X-006 exhaust mufflers be replaced with valve.
6. Install fittings and mufflers on valve and replace in reverse order.

6009X-011 Timer (HD2 only)



1. Remove 6009X-010C retaining nut from control valve and drop solenoid/timer from unit. Remove timer from solenoid with 1 screw.
2. Replace timer and install in reverse order.

TESTING THE UNIT

1. Check air tanks for accumulated moisture and drain as required.
2. Start air compressor and allow system pressure to build until cut out pressure.
3. Check all connections for air leaks.

NOTE: After air dryers exhausts, air will continue to bleed out of exhaust port until regeneration timed cycles is completed

4. NOTE: A soap solution works very well for locating leaks.

WARRANTY

For the period of one (1) year, Seller's sole obligation and Buyer's sole and exclusive remedy for any defect Product(s) shall be Seller's reimbursement of the "Warranty Expense". In addition Seller's obligation for the Product(s) which are not in conformance with the Seller's warranty shall be further limited to those product(s) which are promptly returned to Seller after discovery of any alleged defect with Freight prepaid to the warehouse designated by the Seller's representative and which Product(s) are found by Seller (in the exercise of its sole and exclusive judgment made by Seller experienced and highly skilled personnel) to have been defective in accordance with the warranty. Seller will in no event be liable for any consequential special or contingent damages or expenses arising directly or indirectly from any defects in its goods or from the use thereof, nor is any other person authorized to assume for the seller any such liability or any contrary representations or warranty on behalf of the Seller.

In no event shall the Seller be obligated under Seller's agreement or otherwise in any manner whatsoever for normal wear and tear of any product(s) which in the seller's sole and exclusive determination have been subjected to accident, abuse, misapplication, improper repair or alteration or maintenance, neglect, excessive operating conditions or for defects resulting from Buyer's specifications or designs, or otherwise caused by the Buyer, including without limitation defects resulting from Buyer's manufacture, distribution, sale or promotion of its own product.

Seller expressly disclaims any implied or expressed warranty of fitness for a particular purpose. It is understood that such products are warranted to be fit for their ordinary intended use.

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DRAWINGS

The following drawings are supplied with this manual:

6001A-001 thru -006

6002A-001, 002

6003A-001, 002

6005A-001

6007A-001, 002

6007E-001, 002

6007M-001

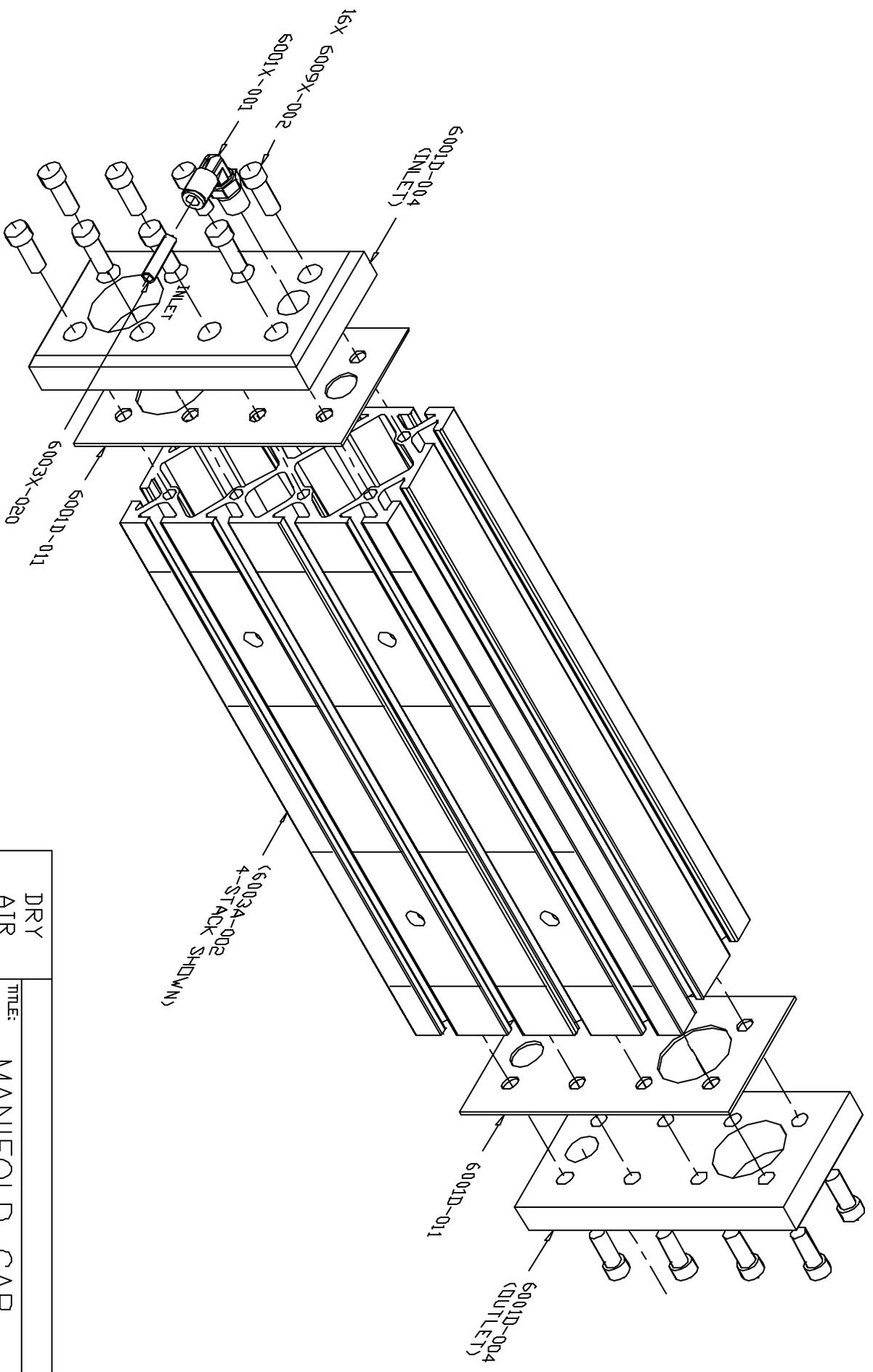
6009A-001, 002

6016A-001

XL76

Drawings can be beneficial when referencing maintenance procedures in this manual. System troubleshooting and replacement parts procurement can also be facilitated with the following drawings:

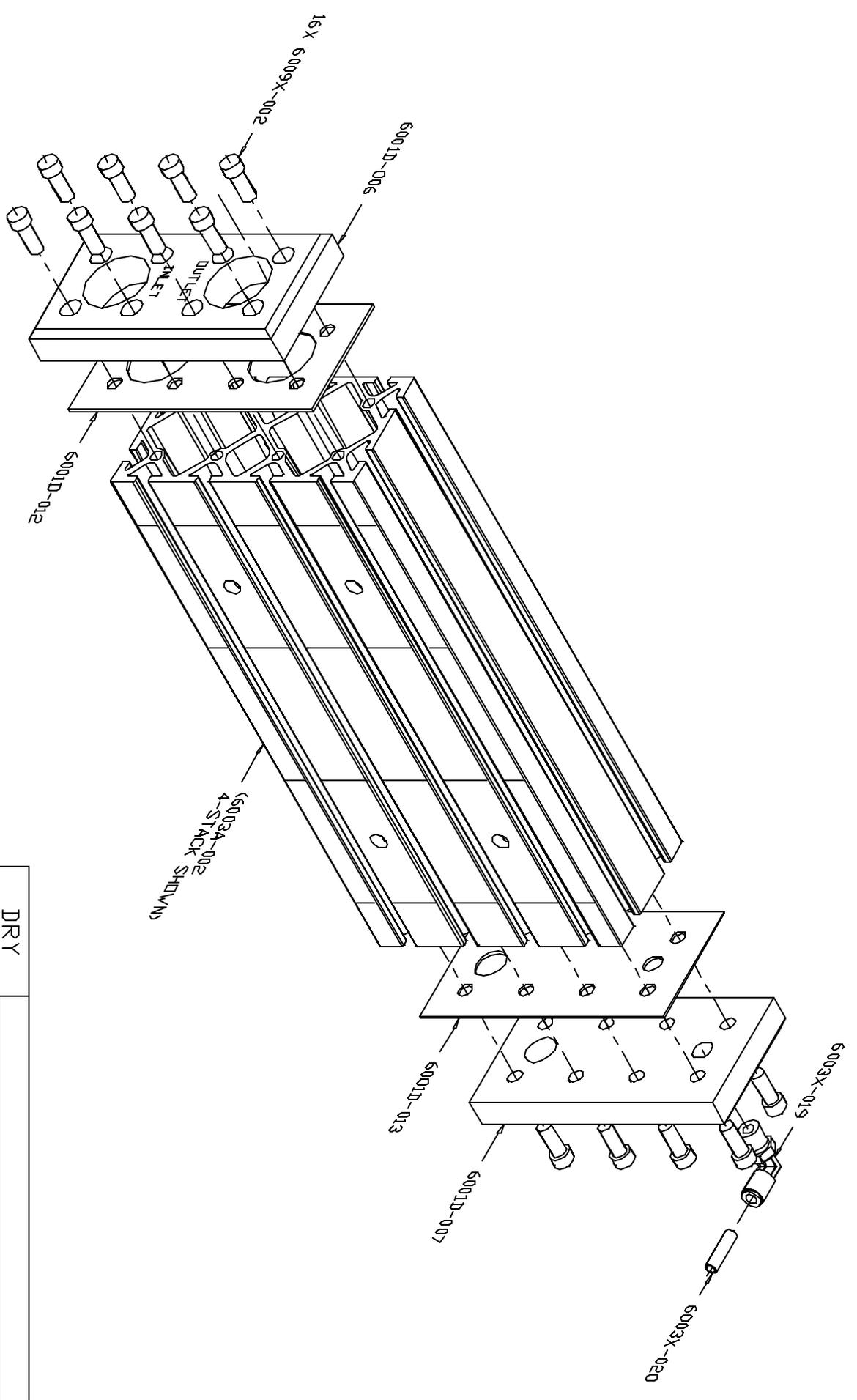
REV	DATE	DESCRIPTION



NOTE: SOME DETAIL NOT SHOWN
 NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS		TITLE: MANIFOLD CAP ASSEMBLY	
XX +/- .03	XXX +/- .010	SIZE DWG #: 6001A	DASH #: 001
XXXX +/- .0050	ANGLES +/- .1DEG	SCALE: NONE	SHEET 001
EXCEPT AS NOTED		REV	-

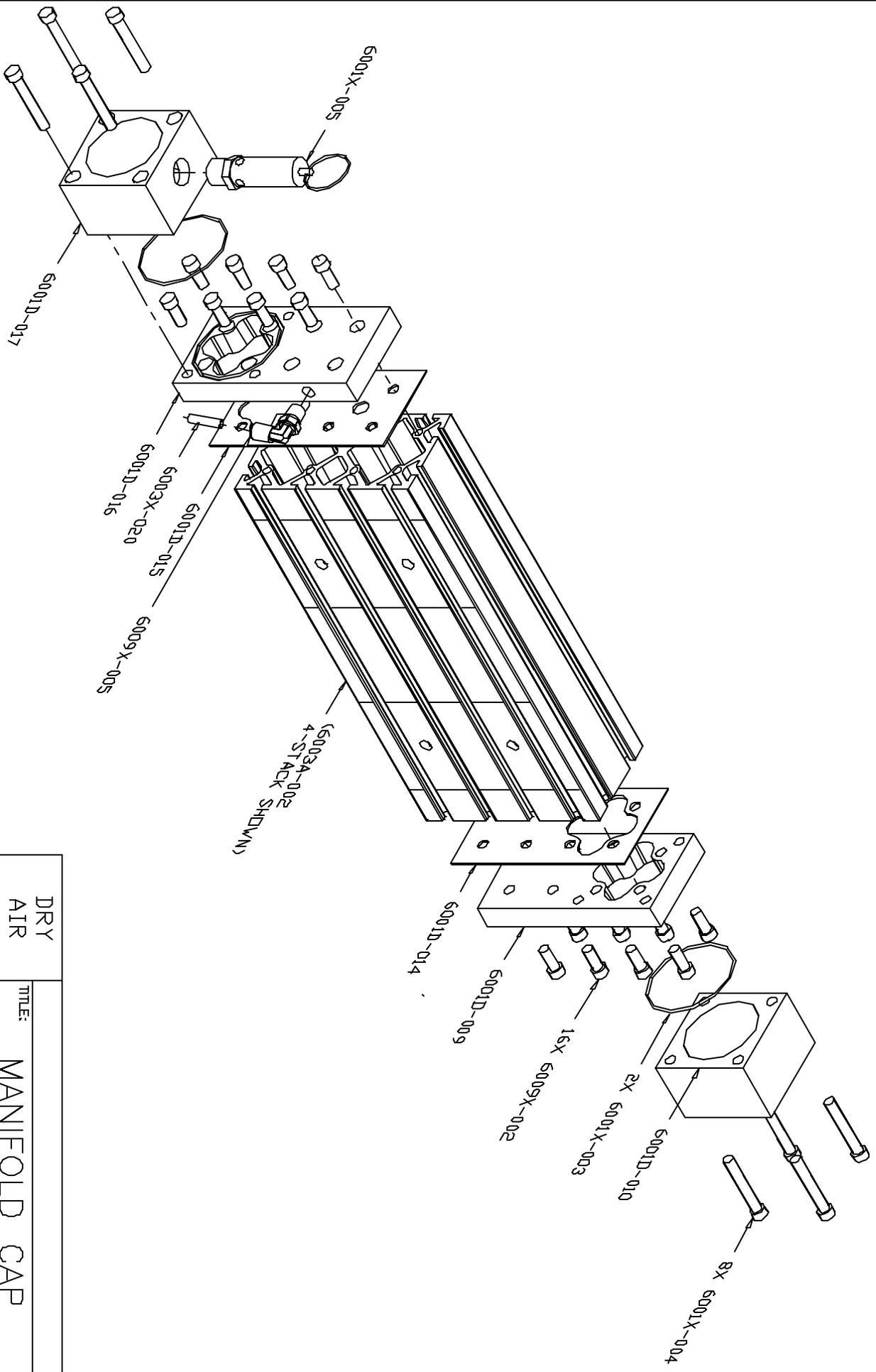
REV	DATE	DESCRIPTION



NOTE: SOME DETAIL NOT SHOWN
 NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS		TITLE: MANIFOLD CAP ASSEMBLY	
XX +/- .03	XXX +/- .010	SIZE DWG #: 6001A	DASH #: 002
XXXX +/- .0050	ANGLES +/- .1DEG	SCALE: NONE	SHEET 002
EXCEPT AS NOTED		REV	-

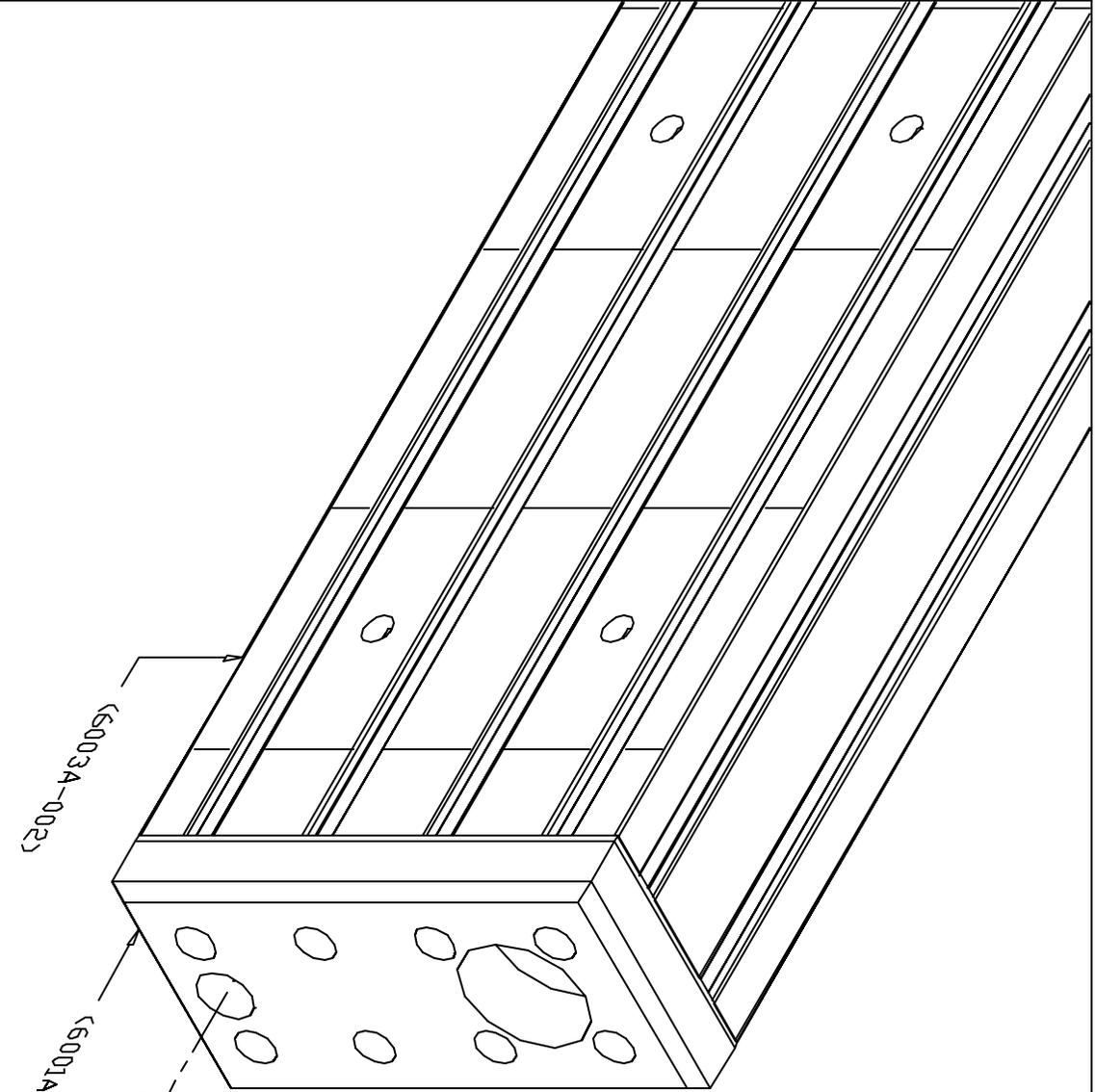
REV	DATE	DESCRIPTION



NOTE: SOME DETAIL NOT SHOWN
 NOTE: DO NOT SCALE DRAWING

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EXCEPT AS NOTED		SHEET 003	REV -

REV	DATE	DESCRIPTION

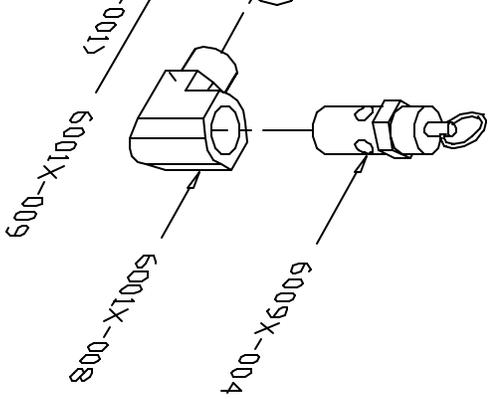
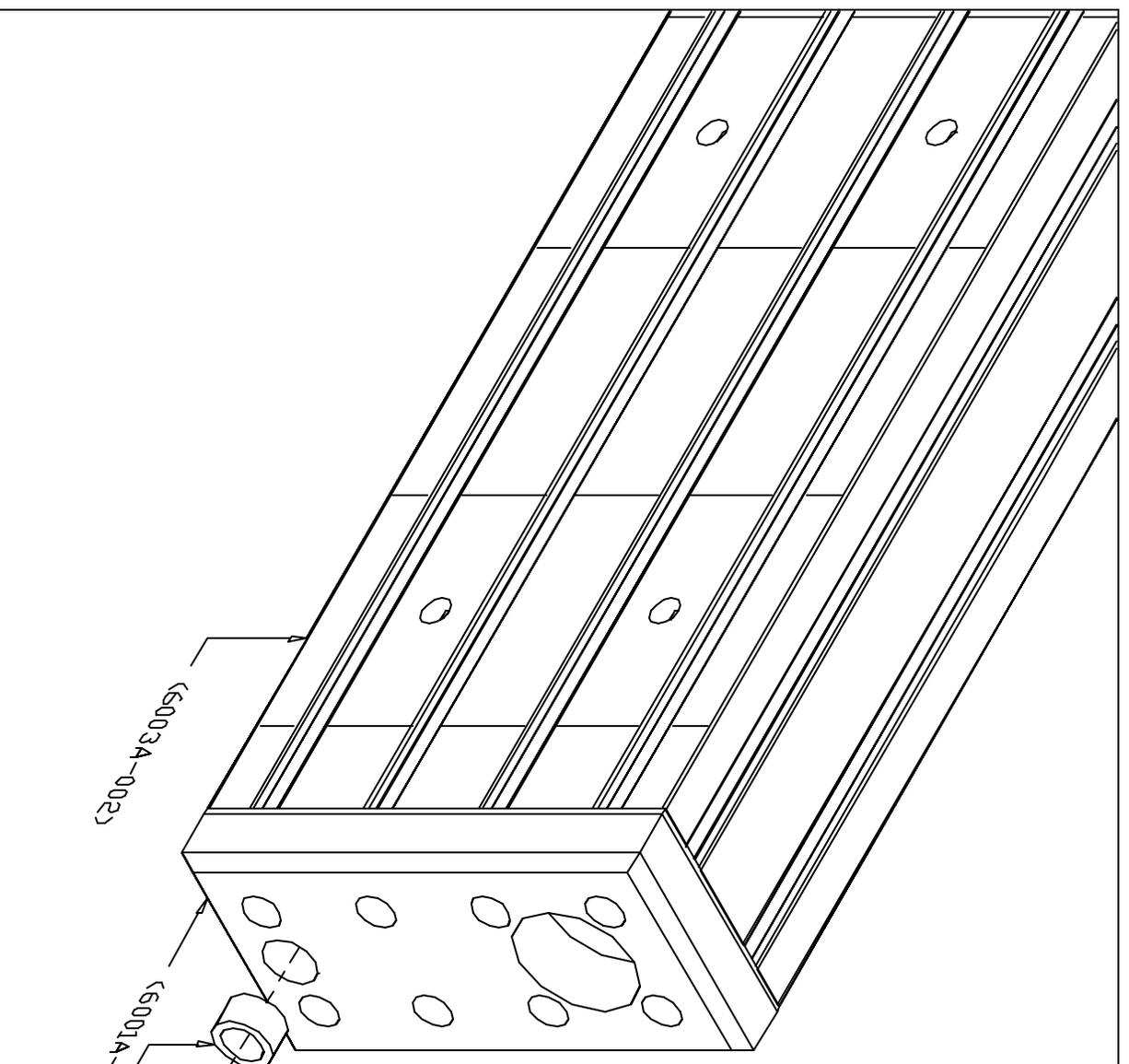


NOTE: SOME DETAIL NOT SHOWN
 NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS		TITLE:	
3/8" PRESSURE RELIEF ASSEMBLY		SIZE DWG #:	
6001A		DASH #:	
A		004	
SCALE: NONE		SHEET #:	
		004	

XX +/- .03
 XXX +/- .010
 .XXXX +/- .0050
 ANGLES +/- .1DEG
 EXCEPT AS NOTED

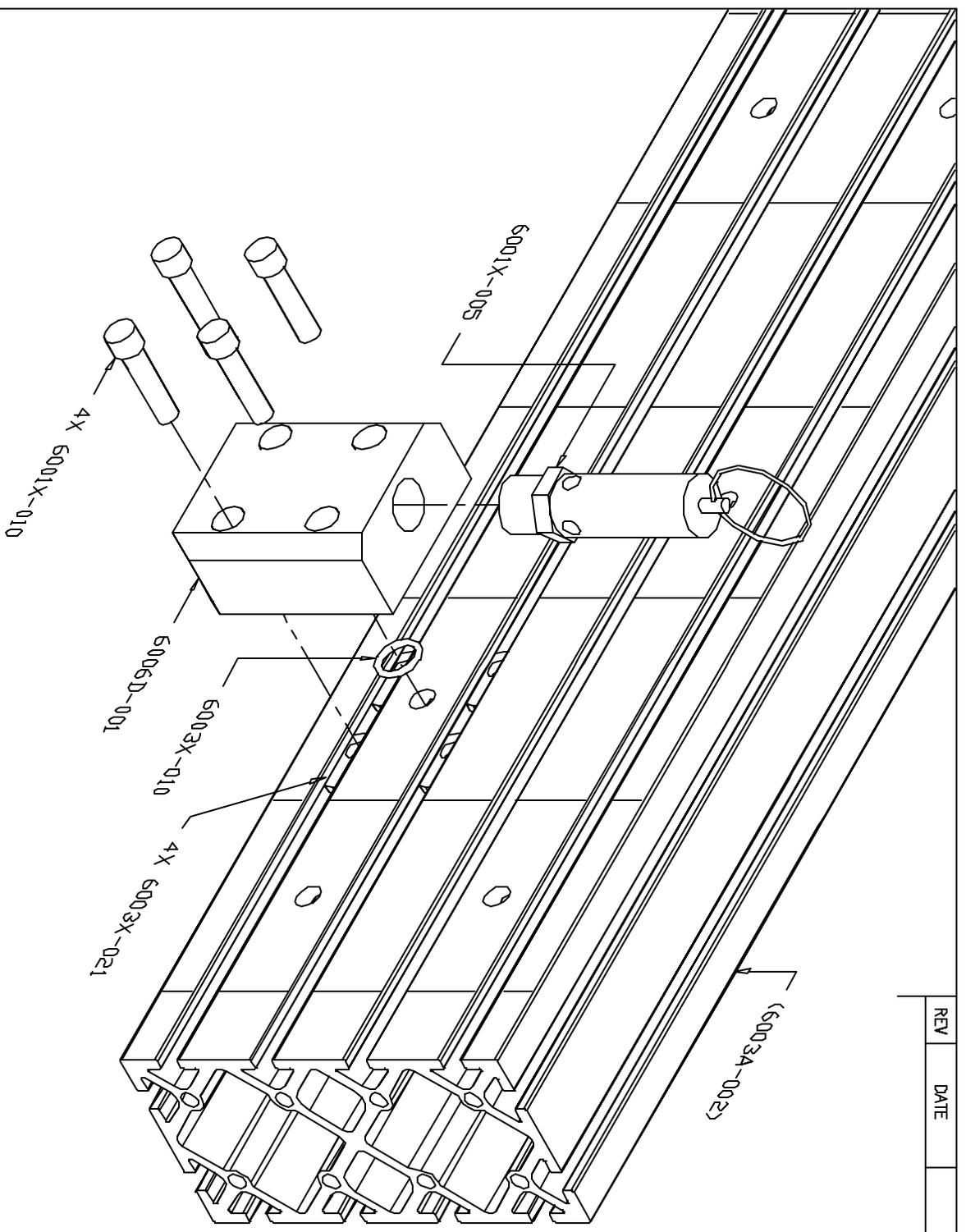
REV	DATE	DESCRIPTION



DRY AIR SYSTEMS	TITLE: 1/4" PRESSURE RELIEF ASSEMBLY
XX +/- .03 XXX +/- .010 XXXX +/- .0050 ANGLES +/- .1 DEG EXCEPT AS NOTED	SIZE DWG #: A 6001A DASH #: 005
SCALE: NONE	SHEET 005

NOTE: SOME DETAIL NOT SHOWN
NOTE: DO NOT SCALE DRAWING

REV DATE DESCRIPTION

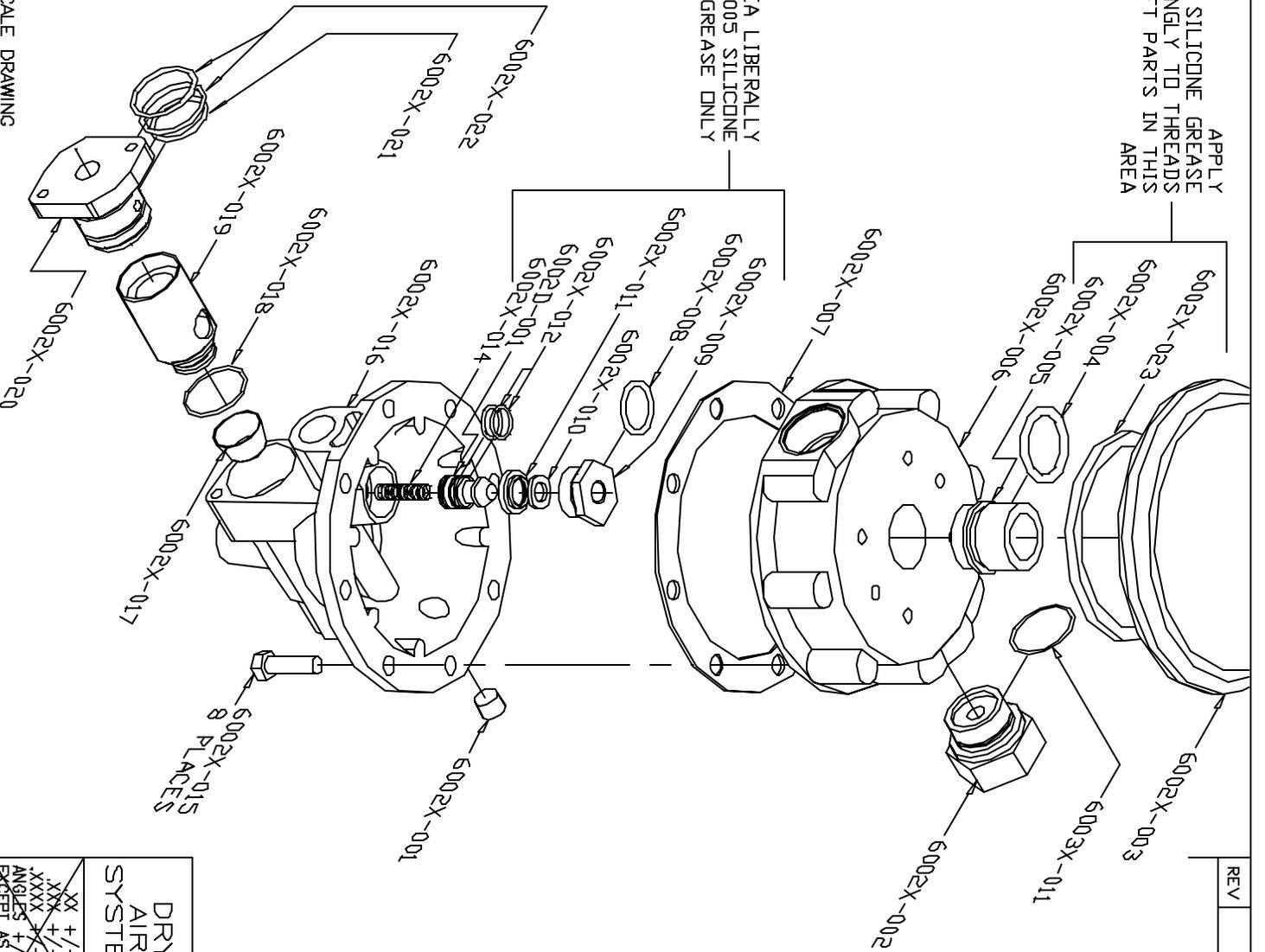


NOTE: SOME DETAIL NOT SHOWN
 NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS		TITLE: 1/2" PRESSURE RELIEF ASSEMBLY	
XX +/- .03	XXX +/- .010	SIZE DWG #: 6001A	DASH #: 006
XXXX +/- .0050	ANGLES +/- .1DEG	SCALE: NONE	SHEET # 006
EXCEPT AS NOTED			

APPLY
GREASE
TO
THREADS
AND
SOFT
PARTS
IN
THIS
AREA

PACK THIS AREA LIBERALLY
WITH 6002X-005 SILICONE
GREASE ONLY



NOTE: DO NOT SCALE DRAWING

REV	DATE	DESCRIPTION

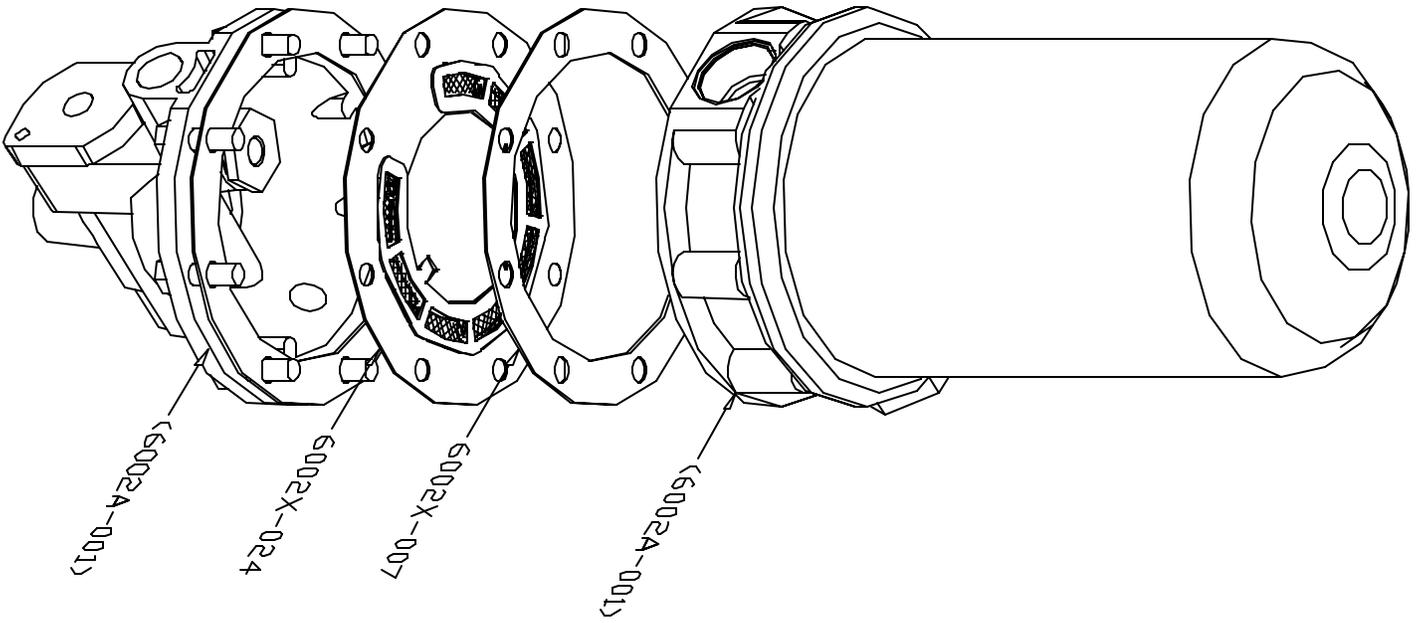
DRY AIR SYSTEMS		MATERIAL: no		HEAT TREAT: no	
TITLE: DRIER					
SIZE A	DWG #: 6002A	DASH #: 001	REV -	SCALE: NONE	
SHEET 001			SHEET 001		

XX +/- .02
XXX +/- .005
XXXX +/- .0025
ANGLES +/- .1 DEG
EXCEPT AS NOTED

REV

DATE

DESCRIPTION



NOTE: DO NOT SCALE DRAWING

DRY
AIR
SYSTEMS

TITLE: OIL SEPARATOR

MATERIAL: n/a

HEAT TREAT: n/a

XX +/- .02
 XXX +/- .005
 .XXXX +/- .0025
 ANGLES +/- DEG
 EXCEPT AS NOTED

SIZE DWG # 6002A DASH # 002
 A
 SCALE: NONE SHEET 002

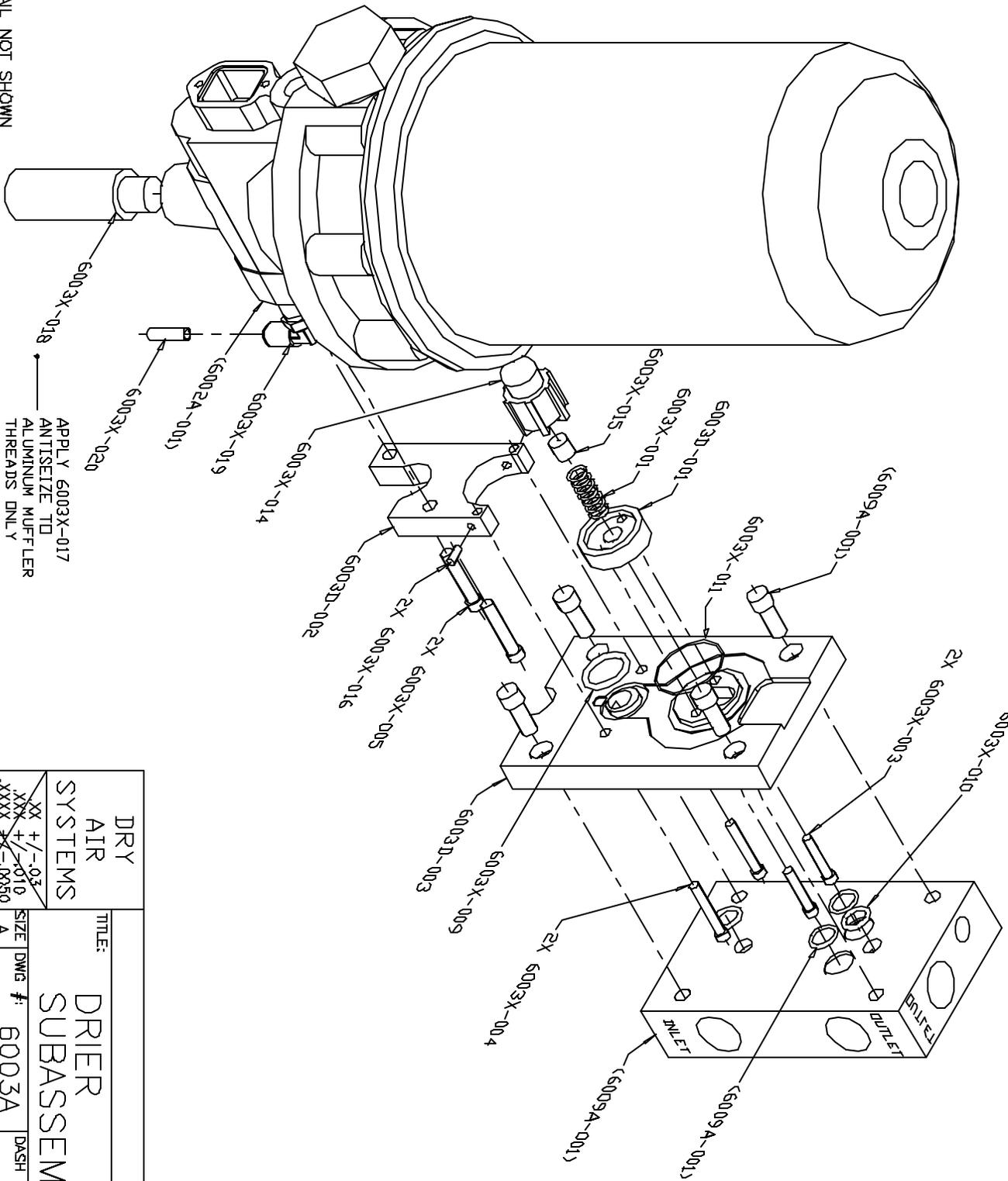
REV

002

-

QTY 1+

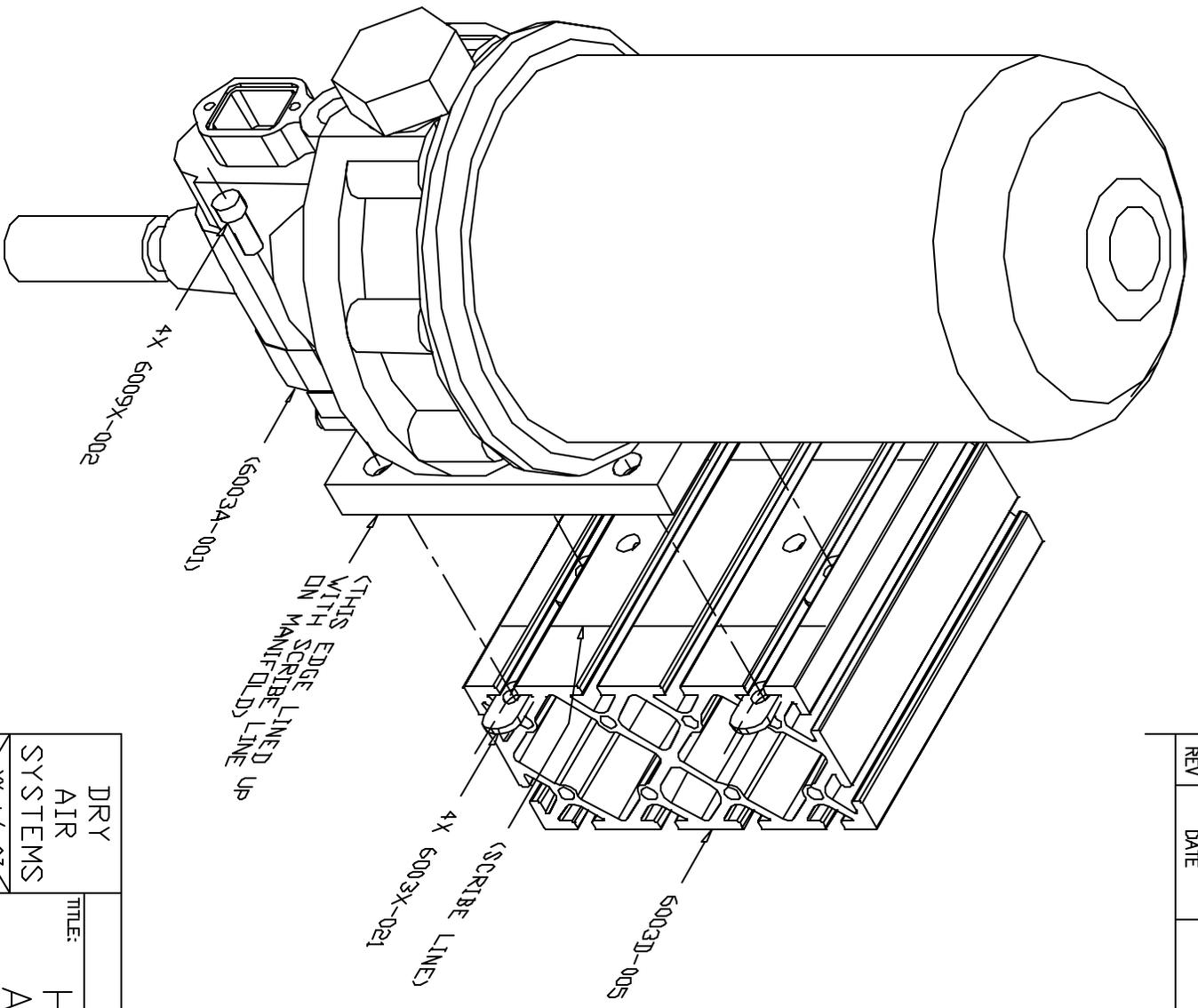
REV	DATE	DESCRIPTION



NOTE: SOME DETAIL NOT SHOWN
 NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS		TITLE: DRIER SUBASSEMBLY	
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XXXX +/- .0050	ANGLES +/- .1 DEG	SCALE: NONE	REV: -
EXCEPT AS NOTED		SHEET: 001	

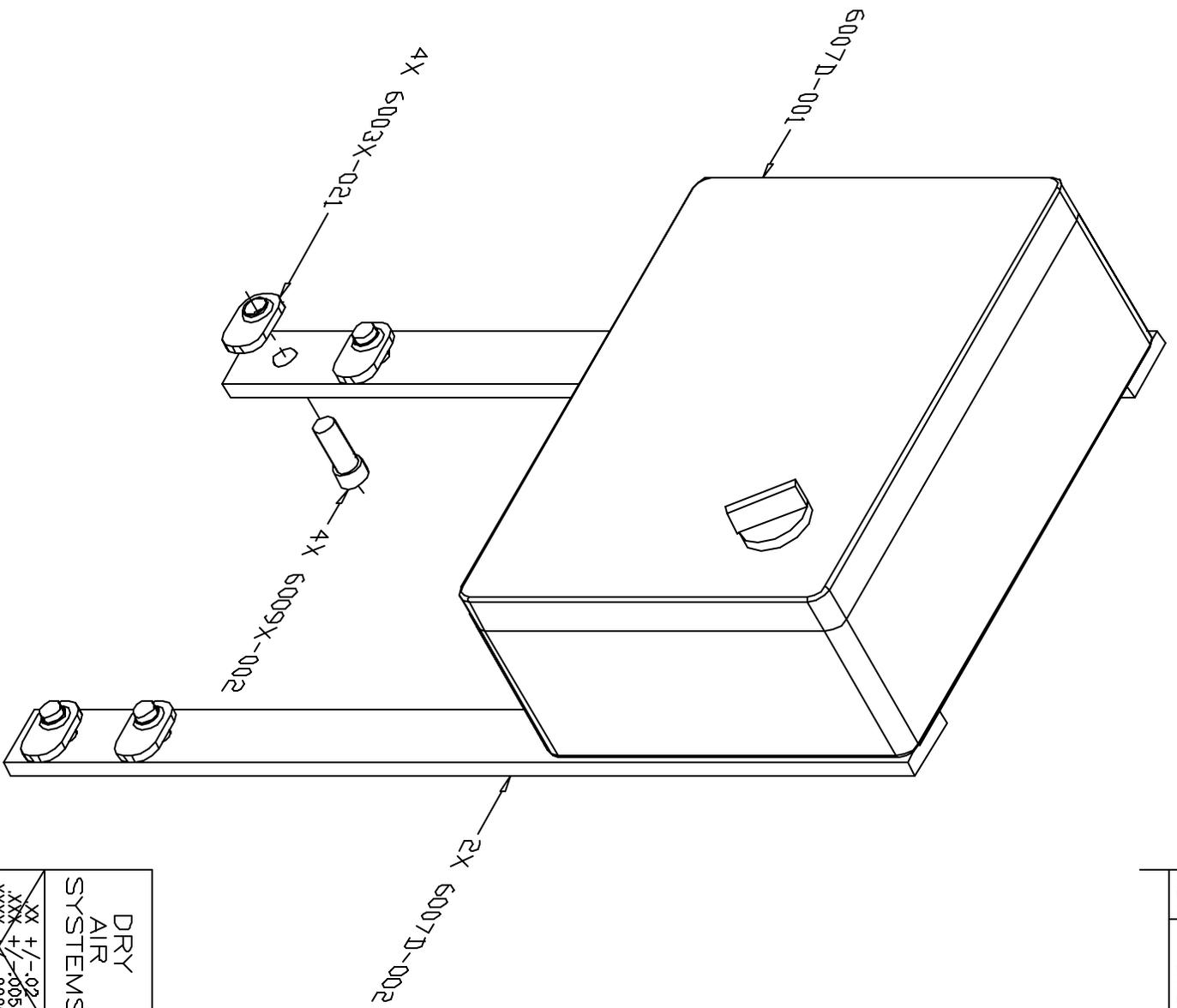
REV	DATE	DESCRIPTION



NOTE: SOME DETAIL NOT SHOWN
 NOTE: MULTIPLY ITEM QUANTITIES BY # DRIERS, EXCEPT QTY 1 OF 6003D-005
 NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS		TITLE: HD3+ DRIER ASSEMBLY	
XX +/- .03	XXX +/- .010	SIZE DWG #:	DASH #:
XXXX +/- .0050	ANGLES +/- .1DEG	A	6003A 002
EXCEPT AS NOTED		SCALE: NONE	REV: -
		SHEET	002

REV	DATE	DESCRIPTION

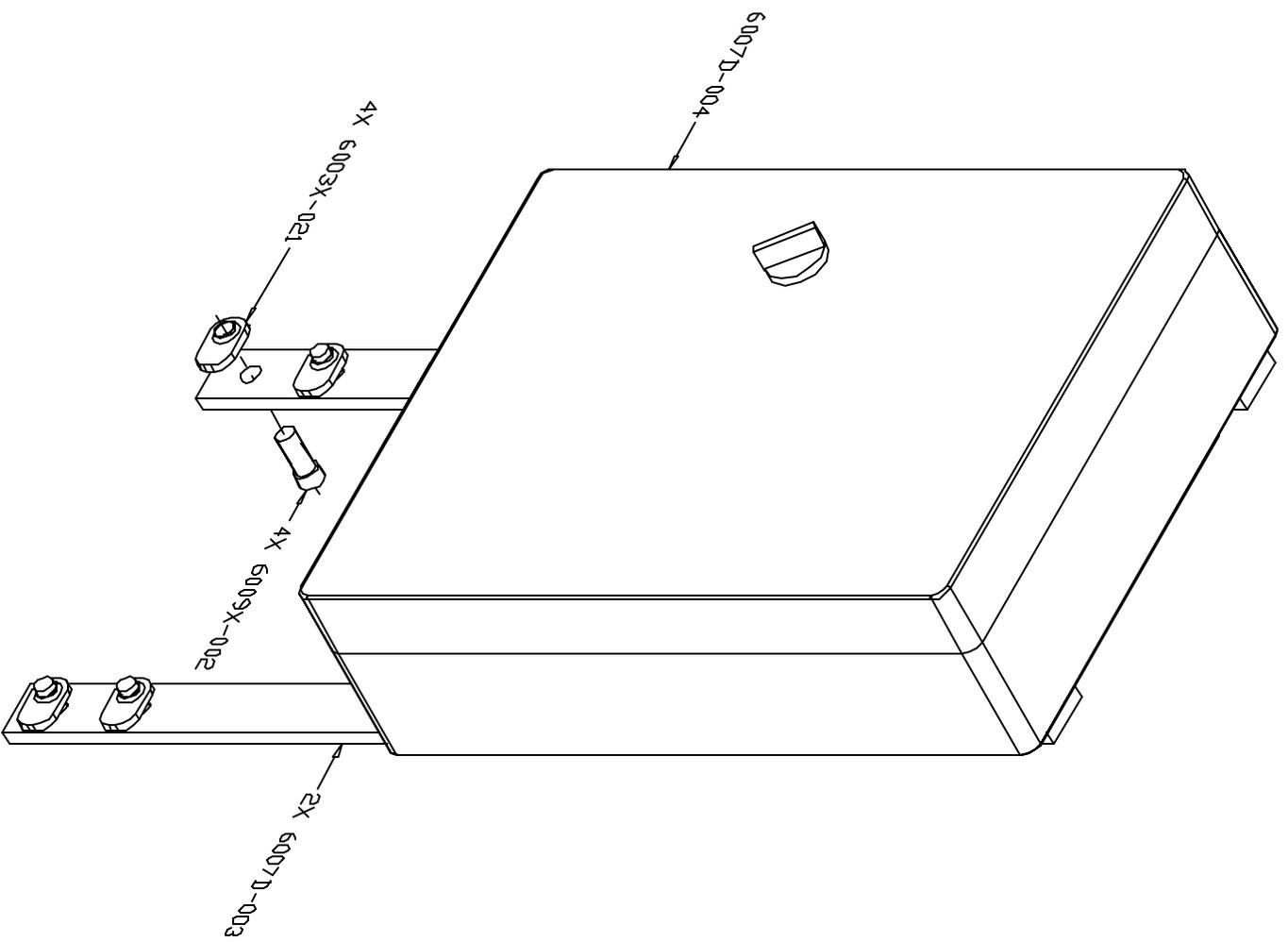


NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS		MATERIAL: C.R.S.		HEAT TREAT: n/a	
TITLE: STANDARD CONTROL BOX					
SIZE	DWG #	DASH #	REV		
A	6007A	001	-		
SCALE:	NONE	SHEET	001		

XX +/- .02
 XXX +/- .005
 .XXXX +/- .0025
 ANGLES +/- DEG
 EXCEPT AS NOTED

REV	DATE	DESCRIPTION

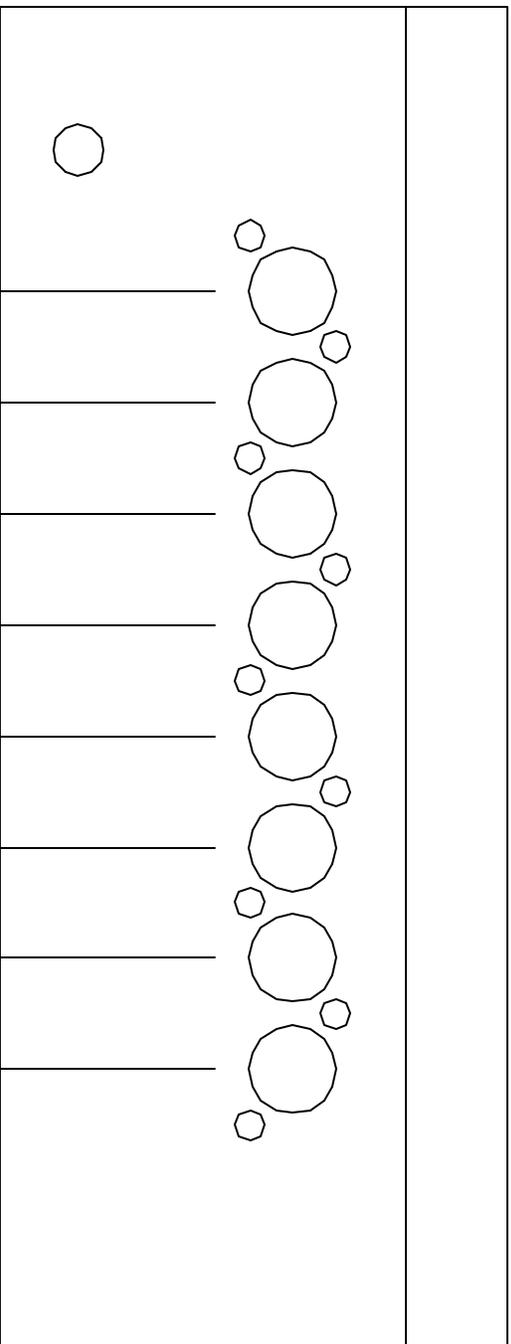


NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS XX +/- .02 XXX +/- .005 .XXXX +/- .0025 ANGLES +/- DEG EXCEPT AS NOTED		MATERIAL: n0 HEAT TREAT: n0	
TITLE: INDUSTRIAL CONTROL BOX			
SIZE	DWG #:	DASH #:	REV
A	6007A	002	-
SCALE:	NONE	SHEET	002

QTY 1

REV	DATE	DESCRIPTION



3--STACK	E	3	-	-	-	2	1	S
4--STACK	H	4	3	-	-	2	1	P
5--STACK	A	5	4	-	-	3	2	P
6--STACK	U	6	5	4	3	2	1	L
	S							Y
	T							

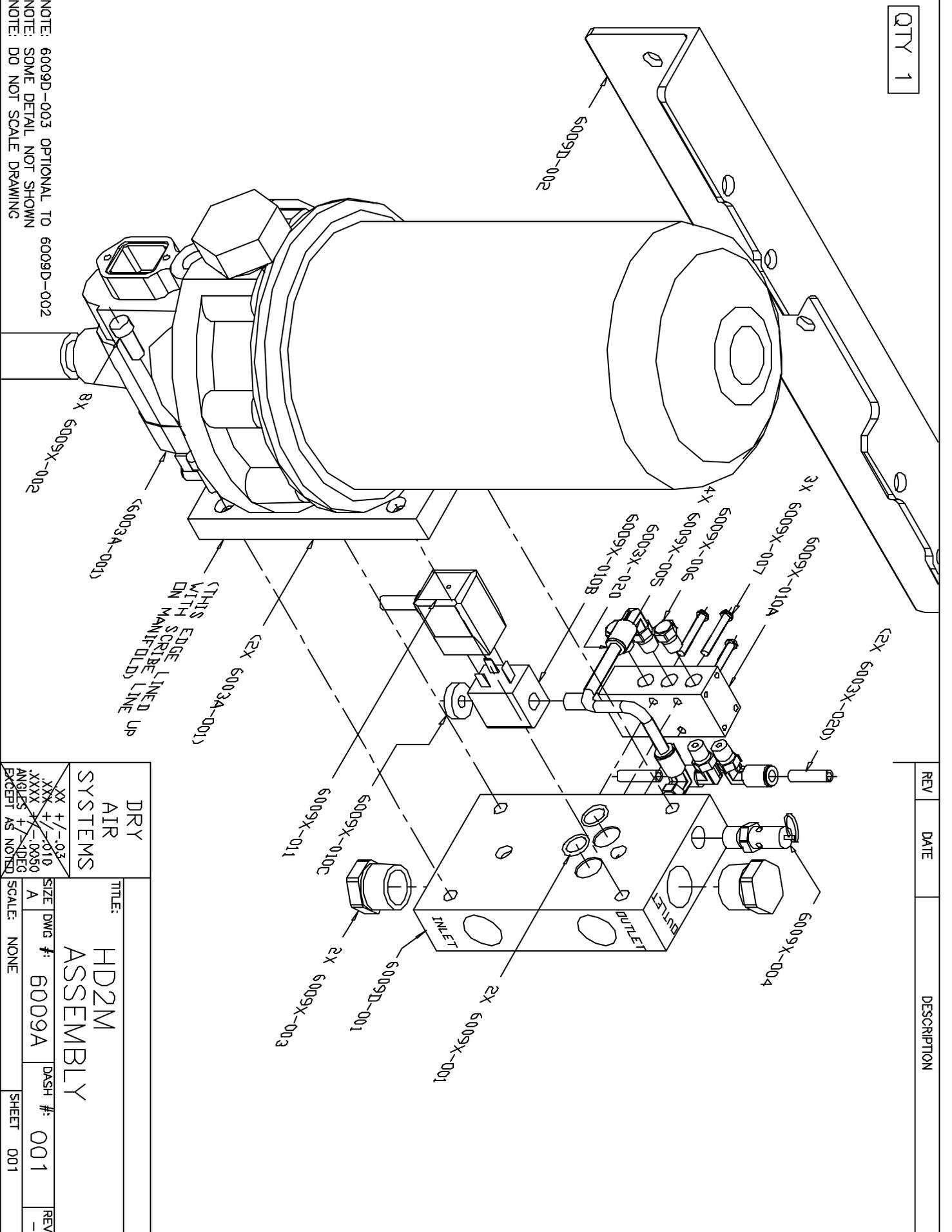
DRYER

NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS		TITLE: CONTROL BOX - MISCELLANEOUS	
MATERIAL: -		SIZE: A	DWG #: 6007M
DASH #: 001		SCALE: NONE	SHEET 001
XX +/- .03 XXX +/- .010 XXXX +/- .0050 ANGLES +/- .1 DEG EXCEPT AS NOTED		REV: -	

QTY 1

REV	DATE	DESCRIPTION

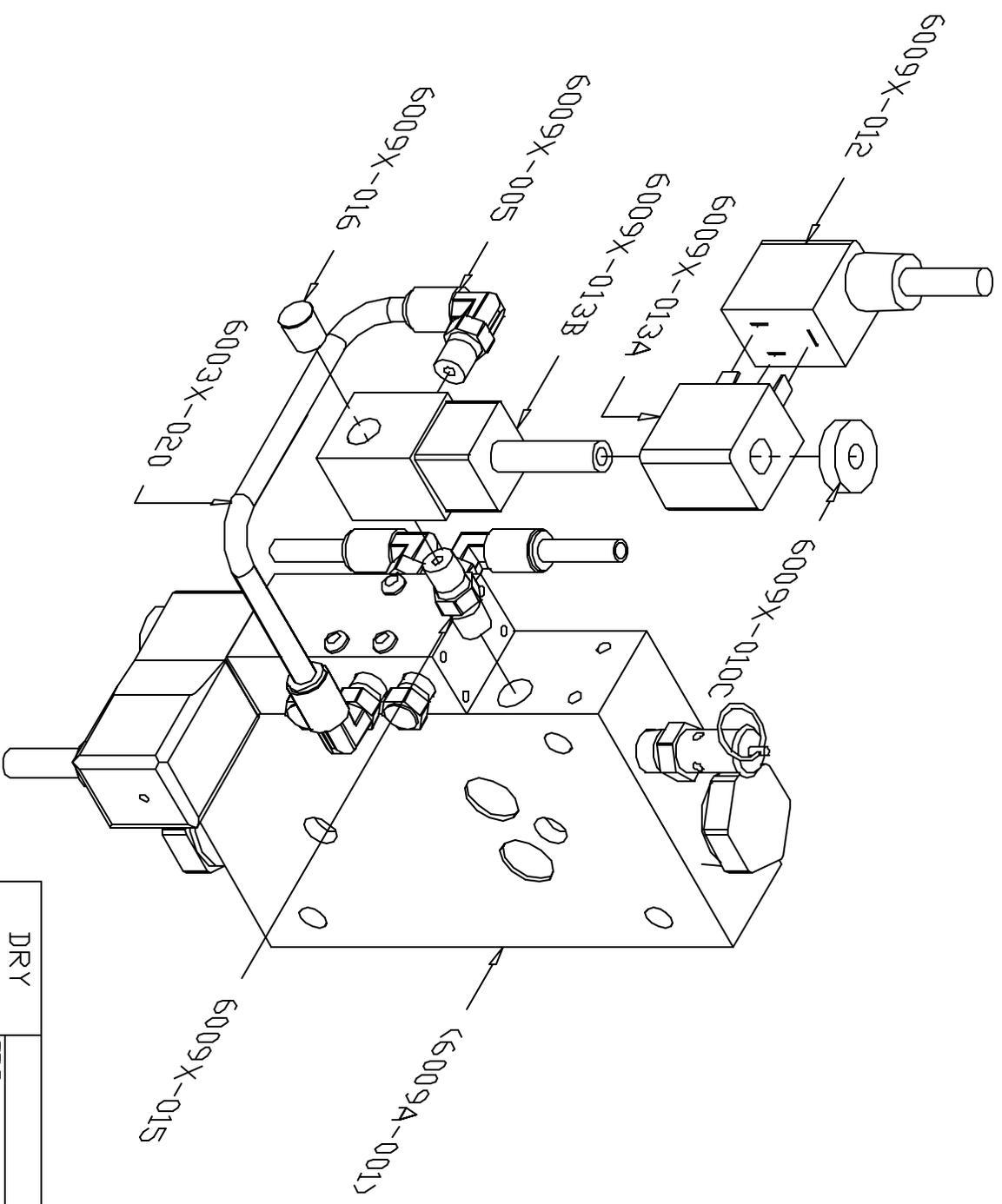


NOTE: 6009D-003 OPTIONAL TO 6009D-002
 NOTE: SOME DETAIL NOT SHOWN
 NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS		TITLE: HD2M ASSEMBLY	
XX +/- .03	XXX +/- .010	SIZE DWG #: 6009A	DASH #: 001
XXXX +/- .0050	ANGLES +/- .1DEG	SCALE: NONE	SHEET 001
EXCEPT AS NOTED		REV: -	REV: -

QTY 1

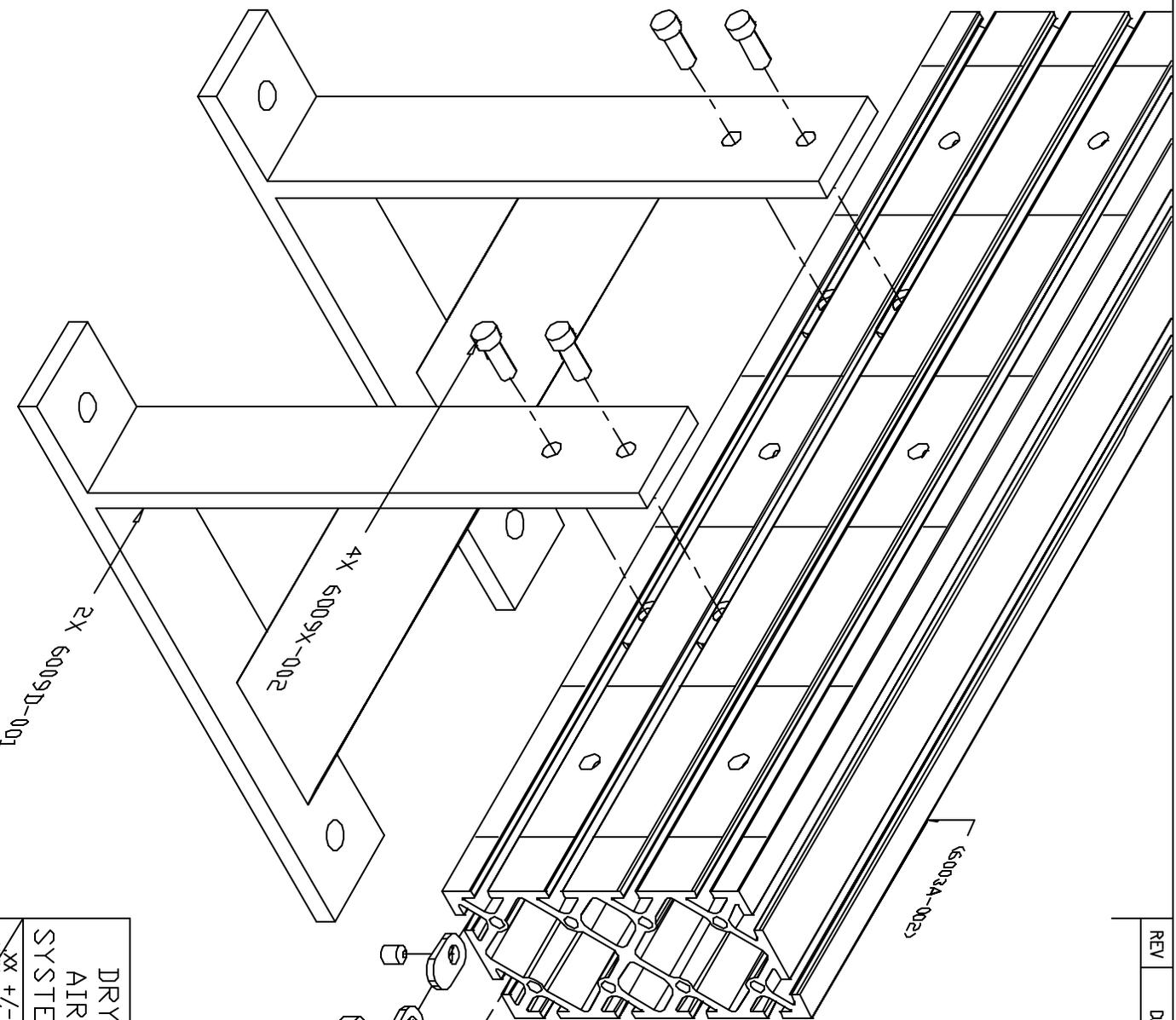
REV	DATE	DESCRIPTION



NOTE: SPECIFY PIGTAIL OR MALE RECEPTACLE ON 6009X-012
NOTE: NECESSARY TO SPECIFY VOLTAGE ON 6009X-013B
NOTE: SOME DETAIL NOT SHOWN
NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS	TITLE: HD2M-IDS ASSEMBLY
XX +/- .03 XXX +/- .010 XXXX +/- .0050 ANGLES +/- DEG EXCEPT AS NOTED	SIZE DWG # DASH # REV A 6009A 002 -
SCALE: NONE	SHEET 002

REV	DATE	DESCRIPTION



NOTE: SOME DETAIL NOT SHOWN
 NOTE: DO NOT SCALE DRAWING

DRY AIR SYSTEMS		TITLE: DRIER MOUNT ASSEMBLY	
XX +/- .03	XXX +/- .010	SIZE DWG #:	DASH #:
XXX +/- .0050	ANGLES +/- .1 DEG	A 6016A	001
EXCEPT AS NOTED		SCALE: NONE	REV -
		SHEET	001

XL76A

The XL76 valve sequencer will sequence up to 6 valves, holding each valve on for 45 seconds. A stop input provides a means of stopping operation and resetting the sequence. An internal set of jumpers sets the number of valves to be sequenced from 3 - 6.

Power Supply Requirements

Maximum operating voltage:	24 VDC
Minimum operating voltage:	8 VDC
Maximum current draw :	400 ma

Timing Sequence

Valve step time:	45 seconds
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Stop Input ratings

Maximum overload voltage:	250 VAC
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Valve drive output ratings

Maximum drive current:	250 ma per channel
Maximum pulse current:	400 ma per channel
Maximum valve control voltage:	24 VDC

Two methods to determine valve drive current :

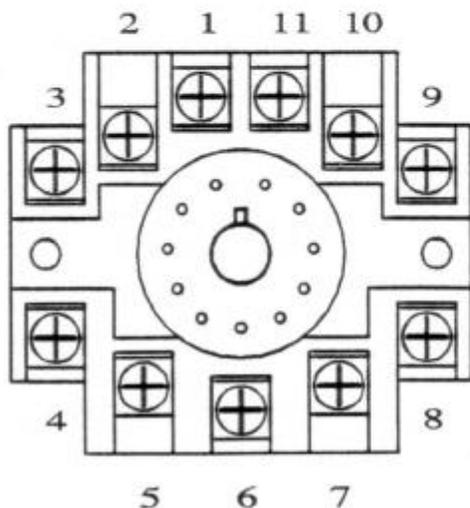
Valve control voltage / Valve Coil Resistance = drive current

$$12\text{VDC} / 69 \text{ ohms} = 173 \text{ ma}$$

Solenoid rating in watts / Valve control voltage = drive current

$$2.2 \text{ watts} / 12\text{VDC} = 83 \text{ ma}$$

XL76A Input Wiring:



- 1 Valve 1
- 2 Valve 2
- 3 Valve 3
- 4 Valve 4
- 5 Valve 5
- 6 Valve 6
- 7 Not Used
- 8 Not Used
- 9 System Ground
- 10 Stop Operation
- 11 +12 VDC

Valve number Settings:

